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EDUCATION AND EMPIRE

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ADDRESSES ON CERTAIN TOPICS OF THE DAY

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PREFACE

THE addresses which this little volume contains were delivered under varying circumstances, and no one of them was, or with propriety could have been, in the nature of a party speech. Nevertheless, the first four illustrate some of the articles in a political creed of which I count myself an humble but firm adherent.

There is a Liberalism which some of us believe to be the Liberalism of the future. It holds that the faith which it has made its own cannot stand still, but must advance with the advancing needs of new generations. To-day, at the beginning of the twentieth century, we as

a nation have to face the problem of preserving our great commercial position, and with it the great empire which the great men of past generations have won and handed down to us. That empire it is our duty to hold as a sacred trust, and to pass on in such a fashion that those who come after may be proud of us, as we are proud of the forefathers who did their work before our time. The duty which we have to discharge requires an effort. That effort must assume the form neither of swaggering along the High Street of the world, nor of sitting down with folded hands on a dust heap. It is rather to be sought in clear views and activity of the kind that is at once unhasting and unresting. Around us is surging up a flood of new competition. If we are to hold the ground which our predecessors won before the days of that

competition, we shall require above all things enlightened views, and not least enlightened views about our commerce, and enlightened views about the common constitution which unites us with our colonies and dependencies. With the former of these necessities the two addresses on education deal. The first was delivered to commercial men in a great city which is showing itself thoroughly alive to the new situation. What I there ventured to insist on was this, that not only elementary education in this country, but our secondary and tertiary systems must be thoroughly overhauled and co-ordinated if we are to be brought near to the existing level of Germany, and that to which the United States are rapidly approaching. More than this, to the linkage of the various portions of the education system must be added, in

secondary and tertiary education at all events, the recognition of the double function of our educational institutions, the imparting of 'culture for culture's sake on the one hand, and the application of science to the training of our captains of industry on the other. This means an increase of our educational provision of a tertiary type. In this we are at present far short of both Germany and the United States. London and Birmingham have already shown us how we may found the new teaching universities. Liverpool is making a splendid effort in the same direction.

The second of the educational addresses was delivered to teachers, and its moral is that for the success of any new movement of a comprehensive kind larger and more enlightened views are required on the part of the teachers themselves. For this de-

velopment better training and a better status for the teacher are necessary, and to that end the Government must formulate a policy. It is essential that the spirit of the new policy should be such that the Universities may come into closer connection with the teaching institutions in their districts, and may permeate from above downwards. The dominating influence must be, not the Church, but the University, if efficiency is to be attained. When this happens denominational controversies will be of small importance, and may be left to the diminishing body of the politicians of a past generation.

The third address was delivered in 1900 at the Colonial Institute before the Australian delegates. Its purpose was to examine the working of the unwritten and developing British Constitution as this has been reproduced in Canada and Australia,

and may be in South Africa. It points out the inaptness of the term "federal" to such a type of constitution, and endeavours to indicate the lines along which a closer relation of the Imperial and Colonial Governments may be assisted to self-development. It lays stress on the growing tradition, not the less weighty because unwritten, by which the Imperial Parliament is coming to recognise itself as trustee of its supreme powers for the empire as a whole, and not merely for the home constituencies which return it.

The fourth address presses the importance of constituting a new link in the empire in the shape of a real Imperial Court of Appeal. From more points of view than one, the time seems to have come for the transference of the Appellate jurisdiction of the House of Lords and the Judicial Committee of the Privy

Council to a Supreme Tribunal for the empire. The recent proposals of the Government appear to have fallen short in comprehension as well as courage. Our colonies and dependencies want a real Supreme Court of Appeal, and not merely an upholstered and decorated Judicial Committee, which would continue to be starved in talent by any separate court of the House of Lords which should remain to be manned alongside of it.

The last address is in substance a plea for tolerance. In view of the fact that the majority of our fellow-subjects in the empire are of different religions to our own, a wide outlook among those who rule is essential here as elsewhere.

In the political creed to which I have referred there are, it is needless to observe, many topics other than those touched on in these pages, topics over which there may

be, and probably before long will be, much controversy. But if of the views to the expression of which these addresses are limited it is said that they are in the year 1902 no monopoly of any one political party, my comment will be, "By so much the better."

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EDUCATION AND EMPIRE

I

GREAT BRITAIN AND GERMANY: A STUDY IN EDUCATION

IT is more than twenty years since Mr. Matthew Arnold succeeded in attracting for a time the attention of thoughtful people to certain problems of British government. Of these problems one was the condition of Ireland. His diagnosis of that condition was that it was due to certain differences of temper and outlook between the people of Ireland and ourselves. The desire for Home Rule he set down as a consequence rather than a cause, as the outcome of our failure to

blend Ireland with ourselves in national feeling, as we had succeeded in blending Scotland and Wales, and as Celtic and Catholic France had once succeeded in blending German and Protestant Alsace. The adequate remedy of the disease, he predicted, would not be found in the results of Irish Church Disestablishment, nor yet in land legislation, proper and useful though these might be. Nor yet in either governing Ireland as a Crown colony, nor, on the other hand, casting her as nearly as practicable adrift. What we really had to do was to put intelligence and courtesy into our mode of dealing with the people of Ireland, to shake off certain habits of mind which were but too characteristic of the governing classes in England, and particularly of the great middle class.

"The temper," he wrote, "of the Irish must be managed and their good affections cultivated. If we want to bring the Irish to acquiesce cordially in the English

connection, it is not enough even to do justice and to make well-being general; we and our civilisation must also be attractive to them."

And this involved nothing less than that we must, "and that as speedily as we can, transform our middle class and its social civilisation." Prophetically he pointed out in passing (*Irish Essays*, p. 75) that we should be confronted with an evil similar to that in Ireland in the Transvaal, where the English

"will all be commercial gentlemen—commercial gentlemen like Murdstone and Quinion. Their wives will be the ladies of commercial gentlemen, they will not even tend poultry. The English in the Transvaal, we hear again, contain a wonderful proportion of attorneys, speculators, land-jobbers, and persons whose antecedents will not bear inspection. Their recent antecedents we will not meddle with, but one thing is certain—their early antecedents were those of the middle class in general, those of Murdstone and

Quinion. They have almost all, we may be very sure, passed through the halls of a Salem House and the hands of a Mr. Creakle. They have the stamp of either Murdstone or Quinion. Indeed we are so prolific, so enterprising, so world covering, and our middle class and its civilisation so entirely take the lead wherever we go, that there is now, one may say, a kind of colour of Salem House all round the globe."

Yet he was not as one without hope. He knew, he wrote, that the most flagrant narrowness of the British middle-class mind in its attitude in Irish affairs would be hard to get rid of. What he held to be of several things the one most wanted, the establishment in Ireland of "schools and universities suited to Catholics, as England has public schools and universities suited to Anglicans, and Scotland such as are suited to Presbyterians," could not at the moment be done even by Mr. Gladstone. But the English people

were, he believed, capable of improvement. "Slowly this powerful race works its way out of its confining ruts and its clouded vision of things, to the manifestation of those great qualities which it has at bottom—piety, integrity, good nature, and good humour." Commenting on the friendly Goethe's criticism of our race, "Der Engländer ist eigentlich ohne Intelligenz," he remarks that Goethe did not say that the Englishman was stupid, but only that he is particularly apt, from a certain insularity, from some want of suppleness in his mind, and indeed from his very strength, to take as the rule of things what is customary, or what falls in with his prepossessions and prejudices, and to act stoutly and without misgiving, as if it were the real natural rule of things. What he needs most is what the Germans are fond of calling *Geist*, a large outlook and understanding.

It was not only Ireland that Mr. Arnold had before his mind when he wrote to

this effect. It was the great subject of education, in which he saw his countrymen sadly fallen behind other nations. The battle for State regulation of elementary education he knew was virtually won. But he pointed out that the battle for middle-class education was yet to be fought before we could enter on the process by which alone the want of *Geist* in our middle and governing classes could be made up for. Nearly a quarter of a century has passed since he wrote, and but for one circumstance this battle would still be remote. That one circumstance has arisen. Our middle classes find their position threatened by a new commercial combination. They have been forced to realise that courage, energy, enterprise are in these modern days of little more avail against the weapons which science can put into the hands of our rivals in commerce than was the splendid fighting of the Dervishes against the shrapnel and the Maxims at Omdurman. It is not

wonderful that instead of having, as a few years ago we had, the lead of the world in the manufacture of iron and of steel, we have fallen behind the United States with their enormous natural resources. But it is startling that we have also been beaten in this particular race by Germany. Great Britain regards herself as the leading industrial nation. She has been so for long, and until recent times her place has not been seriously disputed. She *must* continue to increase her commercial output. For it is the foundation on which rest her financial resources, her fleet, her hold on her colonies and dependencies. And yet if anything is clear, it is that she is under the necessity, in these early days of the twentieth century, of making a resolute and successful effort if she is to hold her own. She may not continue to surpass the United States, for Nature has handicapped her in the race with America. But Great Britain must not only maintain the volume of her trade,

but increase it, as the demand for expenditure goes on increasing.

Let us glance at one or two instances of the phenomena which are causing national concern in these islands. I will start, as a good illustration, with the brewing industry. Thirty years ago Germany exported no beer, to-day she exports almost as much as Britain. In former times the knowledge of brewing was at a low ebb in Germany. The whole brewing process was carried out empirically, according to the ideas of the individual brewer. There was no understanding of the chemical changes which took place in the process, no estimate of the output of the malt, no ice cellars, very little machinery, no saccharometer. At last two German brewers, Sedlmayr, of the Spatenbrauerei, in Munich, and Dreher, of Vienna, visited England in order to learn our methods. In England the then methods were still empirical, but the native skill of our brewers had been greater than that of the

Germans, and their efforts had been much more successful. Sedlmayr and Dreher learned a great deal before they returned to Germany, and they realised that there was more still to be learned from science. In 1862 an association called the *Brauer-bund* was formulated for the promotion of the common interests of the German brewers, and by 1871 it was thoroughly organised. Its motto was this: "Die Wissenschaft ist der goldene Leitstern der Praxis; ohne sie nur ein blindes Herum-tappen in dem unbegrenzten Reiche der Möglichkeiten." The result of the efforts of the *Bund* were twofold. Scientific stations were established, notably a great one at Munich, to which the technical problems which confronted the practical brewer could be referred, and where these problems were solved. As we shall see presently, this kind of institution has also taken root in Germany in other industries, and with great results. In the second place, brewing schools were founded.

There are now, if Austria is included, ten of these in different parts of Germany and Austria. The largest are those at Weihenstephan near Munich, at Worms, in Berlin, and in Vienna. These schools, and also the six smaller ones, are provided with class-rooms and laboratories. They have in all cases experimental maltings and a brewery attached to them, and their teachers are the most competent that can be procured.

Let us look at the education which a young brewer gets in these schools, but in order to appreciate the situation let us glance first of all at his preliminary general education.

In England elementary education is compulsory, and is provided and organised under the supervision of the State, largely by local authorities. Secondary and technical education is not compulsory. The State in a limited measure assists, but does not organise or control it. Education of a university type is in a small

measure assisted by the State, but it is not organised by the State at all.

In Germany it is quite otherwise. Not only are elementary, secondary and technical, and university education, all three of them, controlled and organised and brought into close relation to each other by the State, but they are in a large measure made compulsory, either directly or indirectly. Primary education is given in the *Volksschulen.* Attendance there or at a higher school is compulsory up to the age of fourteen, and after fourteen the pupil must, as a rule, attach himself to an evening continuation school for three years longer, where his elementary education is continued and developed. Nearly 9,000,000 children are just now being educated in the primary schools of Germany, and these number about 60,000 schools with about 138,000 teachers. The cost of these schools is £17,500,000 annually, of which the State governments provide £4,780,000. The balance is raised locally

out of rates. Secondary education is not directly compulsory, but indirectly it is made difficult to dispense with. On a satisfactory leaving certificate from one of these secondary schools depends (1) the right of entering on the further courses of study in the Universities and tertiary high schools which have to be pursued by the student who would enter certain very important professions, and (2) the title to exemption from one year of compulsory military service. The secondary schools are of two kinds, classical and modern. The classical schools are known as *Gymnasien.* The modern schools are divided into those where Latin is taught, the *Real-gymnasien*, and those where Latin is not taught, the *Realsschulen.* The *Gymnasien*, as a rule, prepare for the University, and the *Realsschulen* for the High Technical Schools. There are in Germany 1,100 secondary schools for boys, and 300 for girls. These schools educate about 375,000 pupils under about 20,000 teachers. The

cost is upwards of £4,000,000, of which a great part comes from the local authorities and the fees. Secondary education in Germany is not in general free, though primary education is so. But few of these schools are private; all are inspected, and no one is allowed to teach in them without having obtained a certificate of competency. A pupil may go into a secondary school as young as ten or eleven. He remains there about six years, during which he studies, if he is in a *Realschule*, German, English, French, mathematics (including such higher subjects as logarithms, trigonometry, etc.), physics, chemistry, and certain other sciences, and freehand drawing.

With the Universities and technical schools to which this training is the portal we will deal presently. It is time to return to the young brewers. In Germany these begin their work when and not before they have reached the status of the pupil who has had in a secondary school a

scientific training up to the standard which exempts him from one year of military service. Besides producing evidence of this, the would-be student in the brewing school must show that he is over seventeen years of age, and that he has had at least two years of practical experience in a brewery. Indeed, he has often had more experience than this, and the result is that his average age is upwards of twenty-four. As to what follows, I will quote from a description of the course of study at the Weihenstephan school given by Dr. Frew in a paper read before the Society of Chemical Industry three years ago. This course lasts for a year, which is subdivided into a winter and a summer session.

"During the winter session there are lectures on physics, general machinery, brewery machinery, inorganic chemistry, botany (with special reference to yeast), hops, brewing practice, attenuation theory and control of work, book-keeping, the

theory of exchange, and taxation of beer. There are also practical courses in the chemical laboratory and in the use of the microscope, besides practical work in the maltings and brewery attached to the school. In the summer session lectures are given on brewery machinery, organic chemistry, fermentation chemistry, zymotechnical analysis, barley, brewing, faults in working, pure yeast culture, architecture, and theory of exchange. Then there is practical work in the chemical laboratory (zymotechnical analysis), in the physiological laboratory (pure yeast culture), and in the maltings and brewery as before. Besides all this, the student may also, if he so wishes, hear lectures on law, outlines of political economy, commercial geography, and distilling, but these are not obligatory. At the end of the summer session, examinations are held in the various subjects, and the successful men receive their diplomas; the student's work for a whole year is taken into account and is thrown into the balance along with his written examination, thus rendering the cramming system more or less useless.

After leaving the brewery school, the brewer works for a year or two in different breweries, so as to get the maximum of experience, or else he may take the position of brewer (*Braumeister*) in one of the smaller factories. He then gradually works his way up, perhaps taking a position as maltster (*Obermälzer*), foreman in the fermenting-room (*Gährführer*), or washroom-man (*Biersieder*) in one of the larger breweries, until at last he attains the aim of his ambition, and is chosen as brewer or brewing director in one of the large breweries."

I have dwelt thus upon the teaching of brewing in Germany because I wanted to illustrate how the industrial life of that country is in close contact with its academic life. The case of the brewers is but an illustration of the need which those engaged in commerce there feel for the education of a university type which produces the teaching and organisation of their own technical schools. I have chosen brewing as a good illustration of this,

because it is a less familiar illustration than certain others, while hardly less striking. Throughout the industrial world of Germany one finds science applied to practical undertakings by men who have learned, if not in the Universities and high technical schools, at least under teachers produced by these institutions. This is true of a multitude of trades. In electrical engineering, in the manufacture of chemicals, in the production of glass, and of iron and steel, and of many other articles for which Britain used to be the industrial centre, we are rapidly being left behind. A striking case is that of the aniline colours, discovered and first produced in England and manufactured out of English coal-tar. The industry has almost wholly shifted to Germany, although the dyers in this country are the largest consumers. And why? Because in Germany the manufacture has been fostered by research in the university laboratories, and by careful teaching in

the technical schools, with the result that great producing institutions, such as the Badische Anilin Fabrik, have an endless supply of directors and workmen trained in a fashion which we have not the means to imitate.

But the school is in Germany by no means the only point at which the professor comes to the aid of industry. Too little is known in this country of that type of institution sometimes called the *Central-Stelle*, which has no parallel among our business men. I will give one illustration to serve as an instance of numerous others. In this country and in Germany alike, a very important branch of industry is the manufacture of explosives. In Germany, as here, the manufacturers of dynamite, nitro-powders, etc., are rivals, excepting in so far as prices are (and this is often the case) regulated by a mutual arrangement of Groups and Trusts. But while the rivalry of the Englishman is without stint, the

German knows a better way. He is aware of the enormous extent to which he is dependent, in such branches of manufacture, on high science, and further that the best high science cannot be bought by the private firm or company. Accordingly the rival German explosives manufacturers, to follow out the illustration chosen, several years ago combined to subscribe about £100,000, and to found close to Berlin what they call their *Central-Stelle.* This establishment, which is maintained by subscription at a cost of about £12,000 a year, is presided over by one of the most distinguished professors of chemistry in the University of that city, with a staff of highly trained assistants. To it are referred as they arise the problems (in this industry these abound) by which the subscribers in their individual work are confronted. By it is carried on a regular system of research in the field of production of explosives, the fruits of which are communicated to

the subscribers. The great manufacturers, men like Herr von Duttenhofer, are in constant communication with the establishment, in which they take the keenest interest. In this country, it is needless to say, there exists nothing of the kind. And yet we have to compete with the Germans, not only at home, but in such important markets for explosives as South Africa, where their use is the life of the huge mining industry.

I have lingered thus long over the practical side of the relation of science to industry in Germany, because I do not think that anyone can appreciate the form and fulness of university life there without having this relationship before his eyes. I want now to turn to this life itself.

In Germany academic institutions, just as is the case with her educational institutions of a secondary nature, fall into two groups, that of the University proper, and that of the Technical High School. In the

latter the education is in the main of the tertiary or university type, almost as much as in the case of the former. Indeed, the connection between the two is very close. Anyone who visits Berlin to-day may see in the middle part of the city certain huge buildings. At first he will take them, from their size and appearance, to be factories. But if he inquires what industry the tall chimneys serve he will be told that they belong, not to factories at all, but to the laboratories of various university teachers. In the University of Berlin the professors of chemistry, instead of numbering one or two as with us, consist (I take the figures from the list in the latest edition of the *Minerva Jahrbuch*) of three ordinary, seven extra-ordinary, and twelve *Privat-docenten*, who arrange their work so as not to overlap. Specialised work is thus possible. The great laboratories are places where every kind of research is carried on, and the student has not the hopeless feeling that

he has, say, in Edinburgh or in Glasgow, where a single professor gives a stereotyped course of instruction to all the students of chemistry, however various their aims in life. No wonder that Berlin has been the theatre of marvellous conquests by science of the secrets of nature. It was, to mention a single instance, by patient use of the means placed by the State at his disposal in these laboratories that one of the best known of modern chemists, the late Professor Hofmann, developed so enormously the theory of the aniline colours and their production from coal-tar that this industry has passed from British into German hands. His pupils and successors completed a great career by showing how to produce indigo synthetically, and they extended the process from the laboratory to the factory. Whereas in 1886 Germany imported over 1,000 tons of natural indigo, in 1896 she imported none, but exported 256 tons of the artificially produced article. One of

the great natural products of India is in consequence in serious danger. At the present moment a capital of nearly two millions sterling has been devoted in Germany to its supersession. Taking the coal-tar colour industry as a whole, the comparative figures are only less remarkable than their consequences. In Germany there has been invested in this trade by the six largest firms, such as the Badische Anilin Fabrik, over two and a half millions sterling. They employ about 500 chemists, 350 engineers and technical men, and over 1,800 workpeople. The total capital invested in this manufacture in England (a manufacture, as already observed, of English origin) is about £500,000. It employs only some 30 or 40 chemists and 1,000 workmen. What has been the result? The exports of coal-tar colours from England have fallen from £530,000 in 1890 to £360,000 in 1900. The imports, on the other hand, have increased from £509,000 in 1886 to

£720,000 in 1900. According to the figures as given in an address on the coal-tar industry, delivered this autumn by Dr. A. G. Green, in the Chemical Section of the British Association, the colours used by the Bradford Dyers' Association are now 10 per cent. of English make, 80 per cent. of German, 6 per cent. of Swiss, and 4 per cent. of French.

But the provision for chemistry in the University is not the only provision made for the would-be student of its application to industry. Near at hand, on the other side of the Thiergarten, is that *Technische Hochschule*, the reputation of which is now world-wide. Here there are six departments, manned by professors of university rank. Architecture, civil engineering, marine engineering, mechanical engineering, chemistry and general technical science are, mainly at the cost of the State, taught on a scale which has no parallel in this country. So great has been the public

appreciation of this institution, that the magnificent buildings which were erected in 1884 are already quite inadequate to the needs of the three or four thousand students who attend the lectures and work in the laboratories. The studies of these students, who are of university age, and can only enter on production of proper certificates of competency from the secondary schools, are directed by a great staff of professors and *Privat-docenten* of University rank. I visited the school last spring and found it crammed to overflowing, not only with students, but with all kinds of specimens and apparatus. Every new invention of importance, *e.g.* in electrical machinery, appeared to have been procured and made the subject of practical study.

This kind of alternative University (the Kaiser has recently conferred on the Berlin school the right to grant diplomas of certain kinds) has taken firm root in Germany. There are ten of them (including the one in course of establishment at

Danzig, eleven), in addition to the twenty-two Universities of the ordinary kind. They have been established because the Government has thought it a good investment to pay seventy per cent. of the cost of equipping and running them. They are not free, but the fees are low, and the students appear to make no difficulty about finding these fees. When people in this country talk of the remarkable decrease in the attendance at the Scottish Universities, and ask whether the remedy is not to find the fees of the students, they would do well to study what has taken place in Germany. It is evident that the reason of popularity of the Universities and technical schools there is not that they are free, for they all charge fees, but that they help the student to a position in life. In Berlin I was told that the manufacturers regularly watch the careers of the promising students, and offer them employment as they leave in the great chemical and engineering establishments. How little inducement do we here

offer to our manufacturers to act similarly, and how little inducement there is for the student to come to the University if his aim be to go into business afterwards!

The double aim of the German university system—pure culture on the one hand, and on the other the application of the highest knowledge to commercial enterprise—is a growing feature of German life. In Berlin it has been developed with the aid of the taxes on a magnificent scale. In Leipzig, where alongside of the existing great University a new commercial University has recently been established, the same thing is to be witnessed. Over all Germany the Minister of Education is constantly on the watch, and his business is wherever he deems it necessary to establish a new school of tertiary education or to add to an existing one, to approach the Minister of Finance and get out of him the requisite funds. The Germans grudge expenditure at least as much as we do, but this kind of expenditure experience has taught them

not to grudge. Besides the 22 Universities with their 2,500 professors and 22,000 students, and the 10 Technical High Schools with their 850 professors and 11,000 students, there are 18 other technical schools of a lower grade, and also a number of Commercial High Schools or colleges. Of smaller institutions there are 259 Schools of Agriculture in Prussia alone, attended by 10,000 pupils, and 1,000 other schools where instruction in agriculture is given. Taking primary, secondary and tertiary education together, the expenditure of public money (including rates) on education and instruction amounts to £25,000,000 annually. In 1898, out of 250,000 recruits for the army and navy, there were only 200 who had not been to school—in other words, 1 in 1,250. It shows how the huge system thus slightly sketched has made education progress that ten years ago the proportion was 1 in 141, and twenty years ago 1 in 59.

He would be a pedant who thought that

education alone could determine the commercial position of a nation. Yet more than ever, as science tends increasingly to reduce nature to subjection, education becomes important. In the United States a highly practical people are taking this view, and it is noticeable that the rapid increase there of universities and technical schools is largely due to the faith in their efficacy shown by practical men of business. The millionaire in America seeks to save his soul by building, not churches, but colleges, and if he insists on embodying in their constitution ideas of his own which are not always the highest ideas, this shows his zeal. The British people are not yet a decaying race. The Anglo-Saxon, here as in America, is probably in energy, in courage, and in doggedness of purpose superior to all his European rivals in commerce. If proof of this be wanted it will be found in the way in which the absolute volume of our trade continues at a high level. It is a remarkable tribute

to our race that the assessments for income tax purposes have, during the last ten years, shown an increase of about 20 per cent., while the population has increased only 10 per cent.

But organisation and instruction have been carried to a far higher pitch in Germany and Switzerland than with us, and if we are to hold our position we must furnish ourselves with the discipline and the weapons with which the foreigner has prepared himself for the contest.

Now in suggesting that reform of our education, and particularly of our tertiary education, is essential, I am far from desiring to suggest that we ought to wish to see it entirely subordinated to utilitarian considerations. Culture is an end in itself, and if it is to be won it must be sought for its own sake. But the Germans have shown us how the University can fulfil a double function without slackening the effort after culture. In a certain exquisiteness the flowers of scholarship which

Oxford and Cambridge have produced are probably without examples to rival them, unless it be in France. But for breadth and understanding who will dare to place the record of the work done in Oxford and Cambridge in the department of classical literature above what has been turned out in Germany? Take the editing, and with it the criticism, of Greek philosophy, and compare the shallow formalism which did duty in the English Universities up to about thirty years ago, when German ideas began to penetrate, with the work of German scholars. The memories of Plato and Aristotle owe the influence they have to-day to a Hegel, a Schwegler, a Prantl, and a Zeller, and certainly not to the commentators who until about thirty years ago ruled in the Universities of this country. But it is not right to try to exalt one phase of scholarship at the expense of another. And when we turn to the history of mathematics and of physical science we

may well be proud of the series of great thinkers whose spiritual mother Cambridge has been. Only let no one imagine that in the record of the German Universities, in pure scholarship and pure science alike, in the pursuit of knowledge for the sake of knowledge alone, the work done at Berlin, at Leipzig, at Jena, at Göttingen, during the past hundred years, has not been of a quality as high as any that the world has seen.

The conclusion of the whole matter seems to be that we could establish in Great Britain and Ireland a system of teaching of a university type, with the double aim of the system of Germany, and that without injury to quality in culture. We are proud of Oxford and Cambridge. They have taken centuries to grow up, they are rooted in splendid traditions which we seek not to disturb. But that does not make the educational reformer desire the less to see the expansion of another kind of teaching which

they are not adapted to give, and which is none the less a national necessity. The Victoria University and the University of Wales have taken the way we want. Let us assist still further the magnificent private efforts which made them what they are to-day. Why should not Liverpool and Manchester, with their public spirit and rapidly increasing populations, possess, as in Germany they certainly would, their own Universities? How ridiculous it is to dread that such Universities would prove Liliputian! Why should Leeds not be the headquarters of a Yorkshire University? Why should not Birmingham, where the energy and influence of Mr. Chamberlain have brought about a remarkable fresh development, be the centre for the Midlands; and why should not Bristol, where the soil so far has proved somewhat less fertile, be made by State cultivation the centre for the South-west of England? Why should the four Scottish Universities, by their

very nature of a popular and accessible type, but in the main, owing to the sluggishness and want of ideas of their governors, of little use from the point of view of the application of science to industry, remain as they are to-day? Their students are falling off, and why? Because the young men of our Scottish middle classes are more and more turning their minds to careers in commerce, at home and abroad, and their native Universities offer them but little opportunity of special training. No amount of freedom from the obligation to pay fees will meet the necessities of the case, though the splendid gift of Mr. Carnegie has in it other possibilities which should not fail to be recognised. Why, again, should we not establish in Ireland say two teaching Universities, one in Belfast and the other in Dublin, adapted to the local requirements? We can make them open Universities. The Hierarchy has solemnly and explicitly accepted, in the resolutions

passed at Maynooth in the summer of 1897, the principles of the Test Acts, of a preponderance of lay government, of non-employment of State moneys for denominational purposes, and of security of tenure for the teachers. The Presbyterians of the North are ready to follow suit. No doubt it is true that in Ireland undenominationalism means, and apparently for the present can only mean, the equal treatment of denominations. No doubt the University at Dublin would have a Roman Catholic savour, while that at Belfast would be redolent of Presbyterianism. We may regret this, but we cannot help it, and it is no reason for denying what would at all events be new light in the dark places in Ireland. After all, Ireland is not the only country where education has to take its chance in the struggle with prejudice. We govern here according to English ideas, and our business is to govern Ireland, as far as possible, consistently with the ideas of Ireland.

We have hardly yet realised how many of our difficulties in that unhappy island have arisen from neglect of this useful but forgotten maxim of statesmanship; to how much of failure the constant yielding to the British cry of "No Popery" has condemned us in our struggle to improve the condition of Ireland. Lastly, why should not the great teaching University of London, called into existence by the Act of 1898, but so far only a somewhat unruly infant in swaddling clothes, become the educational centre of our empire? It was only the other day that the Government of New Zealand was announced in the newspapers to have suggested that the best form of memorial to Queen Victoria would be to establish in the new University of the British metropolis a post-graduate research college, where students from every part of the empire could come to carry their scientific training further than is possible in the less specialised colonial and other Universities

and colleges. The fear of local jealousies will doubtless prevail over the somewhat mild enthusiasms of our rulers, and the memorial will not be permitted to assume any such useful form, and thereby will be lost one more opportunity of establishing a new link in Imperial Federation of probably the only type, apart from that of sentiment, that is possible—the type that consists in linking the colonies to us by ties of interests and institutions which they may possess in common with us. London, with its vast industrial population, with its colossal enterprises in commerce and finance, with its huge gas production, its great industries, such as tanning and brewing, its ship-building, is surely of all cities the one where the application of science to industry ought to be developed in special forms without equal elsewhere. How far off we are from the realisation of the idea of a great post-graduate teaching centre for the empire those know best who have had

most to struggle with the apathy, the ignorance, and the jealousy that retard the most strenuous efforts.

The truth is that work of this kind must be more largely assisted and fostered by the State than is the tradition of to-day if it is to succeed. Probably we have a greater capacity for local effort than any other nation. Our municipal life is becoming more and more permeated by intelligence. But the work is not only far too great, but far too important to be left to local or private enterprise. It concerns not localities merely but the nation, and the effort must be the effort of the nation as a whole to gain its feet. The expenditure cannot but be great; but it will be salvage expenditure and cannot be stinted, however desirable economy in other directions may be. For it goes to nothing short of the sources to which our people have to look for the future of that commerce which is their life-blood as a nation.

II

UNIVERSITIES AND THE SCHOOLS IN SCOTLAND

YOU have been so good as to allude to me as one who is keenly interested in the subject of education. I will say to you at once that I am interested in that subject, not merely because it is education, but for the reason that to me it appears the most important, without exception, of the great social reforms which await treatment at the beginning of the twentieth century. Educate your people, and you have reduced to comparatively insignificant dimensions the problems of temperance, of housing, and of raising the condition of your masses. These things solve themselves if you only

get the right spirit into your people. Now, I am not one of those who take a pessimistic view of the educational situation. For when I look at the state of things to-day and contrast it with the state of things thirty years ago, I am conscious of an enormous advance. Elementary education became first compulsory and then free. Secondary education is still in a somewhat incoherent condition, but within the last three years, in Scotland at least, great advances have been made. We owe much to the enlightened policy of Lord Balfour of Burleigh and Sir Henry Craik, and one whom I must also mention in this connection, Mr. Struthers, for the advances that have been made since the Science and Art Department was taken over by the Scottish Education Office. We have seen almost within the last few months great changes made which point to still greater changes in the future. Technical education is becoming something of a reality, in its earlier stages at

all events, among us. Much remains to be done, but the zeal which the Department has shown, to my mind, affords good promise of yet greater things in the near future. It is not stagnation of the education question in Scotland that troubles us. There is more interest in it than there was, and there is more movement in it than there was. Things, as I have said, are a great deal better than they were thirty years ago. But what does disturb me is, not that this country is making no advance, because that is not true, but that this country is not making any advance comparable to the advance which is being made abroad. When I think of the extent to which our commercial intelligence, the training of our captains of industry in science and applied knowledge, depends upon the foundations which are essential to a good general education, I own I am depressed, because I find throughout Great Britain a great backwardness compared with the state of things abroad, and

with our leading competitors in the great markets of the world. One thing I think is seriously wanting, and that is a much more enlightened intelligence on the part of the public with regard to education. I am a student, and if I might venture to suggest it, I would have you who are engaged in the business of education also to be students, of the writings of Matthew Arnold. To my mind Matthew Arnold was a man who understood the real meaning of the education problem of this country, and although he wrote thirty years ago, he has set it before us better than anyone who has written since. He pointed out that our conception of education was a great deal too mechanical. Let me illustrate this, and in illustrating it I will incidentally make a criticism upon the attitude of the elementary teachers of this country. There is too great a disposition to treat elementary teaching as if it were a thing by itself, as if it could be separated from the whole of

knowledge and from the rest of culture. Now that is not a true conception of elementary education. The work of the elementary teacher ought to be part of the work of a section of a great army, and an army which has got to co-operate and work as a whole. It is only by showing that your elementary teaching is linked to something beyond, and that that something beyond is linked to something yet beyond, that you will ever be able to awaken among our people that interest in the whole matter that you have seen for thirty years past in Germany; that zeal which distinguishes Switzerland, aye, and that spirit of progress which distinguishes the United States at the present moment. What we have got to do is to make our people interested in education, and before we can accomplish that we have to make education interesting. Now you elementary teachers will have to bear your part in bringing that about. Do not think I am blaming the elementary teachers, for

they are what the law and the constitution have made them. They have been cut off too much and shut apart in an isolated sphere. Well, the work must be done co-operatively, and the elementary teacher must show some initiative if he is to emancipate himself; and what I feel to be the great problem to-day is the welding of the educational system of this country into one complete whole, in which elementary education, secondary education, and the University shall all be indissoluble parts of one system.

I have chosen for the topic of this address the relation of the University to education, and you will see presently why I have taken that topic. It is because I believe that in this country the Universities ought to be the leaders in permeating our educational system with what Matthew Arnold was fond of calling by its German name of *Geist*—I mean the larger intelligence and culture without which education not only cannot be inter-

esting, but cannot be sufficiently comprehensive to take effect on practical business. You have two great aims in your educational system — culture for culture sake, and the application, so fascinating in these times, and so needed in the present commercial situation, of knowledge to industry. These can only be based on a first-rate system of general education. Their complete attainment depends, however, on the sources of influence which lie beyond general education. The Universities must be not merely detachable superstructures, but the brain and the intelligence which permeates the whole system. Now, I want to-day to follow out something which I tried, I am afraid very imperfectly, to do the other day. In October I delivered an address at Liverpool on the comparative positions of Great Britain and Germany in the matter of education, which some of you may have noticed. In that address, speaking as I was to some of

the leading citizens and leading educational authorities in that great commercial city, troubled just now by the knowledge that its business men are not so well equipped as the business men of America and Germany, I dwelt upon what has been the great feature of the German system. What has made that German system possible is the assistance which the State has given in founding higher education. I pointed out that the people of Germany are generally interested in education, and that this did not come about by accident, but as the result of the perfection of their educational system. I went on to dwell on what that educational system was. I am not going to repeat to-day what I said then. But the study I have made of German education has impressed me very much with something, to which I alluded in Liverpool. I pointed out that in Germany education has this remarkable characteristic—that elementary education, secondary education,

and university education are all co-ordinate, that each one exercises a profound influence upon the others, and when you get to a stage beyond what is elementary, it is only to bring you face to face with a stage beyond that again. And this *linking* has enabled the German people in their education system to accomplish the fulfilment of a double end. Elementary education in Germany is, as you know, a system which is very stringent, and in many respects very severe. In practically all the States—for as a rule in Germany education is not an affair of the Federal Government, but of the States—the child must remain at an elementary school until fourteen, unless he gets a certificate which enables him to say that he has accomplished his elementary course of training. But after that there are the continuation schools, which are very much more thorough affairs than the continuation schools here. Evening classes exist in a highly organised form in most of the

States, and a boy or girl is compelled to attend till the age of seventeen. But that is not all. Compulsion — at least what most people call compulsion — ends with elementary education in Germany, but another sort of compulsion is very promptly applied, which drives the pupil, if he wishes to get on at all in life, into the secondary and technical schools. If you want to forego a year of military service, or to have a post, say, in the telegraph service, you must produce a certificate of training in a secondary school. If you want to enter any of the learned professions, you must do the same thing. If you want to enter the Civil Service of Germany, or if you want to enter almost any of the learned professions, you must produce your certificate of adequate secondary education. Not only this, but in the factories the foreman must in many cases produce a proper certificate of educational training. But Germany presents another feature which must be

borne in mind. The moment you get into the secondary school, you have got the choice between the *Gymnasium*, where the classics are taught, or the *Realschule*, where Latin is not taught, but where the training is in the direction of scientific and technical development. When you have gone through your secondary education—for they stand no nonsense about shortening the course in Germany—then comes the time for a still further choice. You may go into the University to train yourself for pure culture, or for the ordinary professions, or you may go into what is a peculiarly German equivalent for the Universities, the so-called technical high schools, which are not technical high schools as we know them, but institutions of university rank in which you get a training quite up to the university level, and that gives you a chance such as we know nothing of in this country. You come out proficient in chemistry, not as it is taught in the Scotch Universities,

but in special departments of chemistry as applied to varying phases of practical industry. You can be trained in engineering, and not in engineering in the abstract, but electrical engineering, bridge-building, or almost any special subject you like to choose. You may be educated in these great institutions in naval architecture, or a score of other things for which the State makes provision in Germany. What is the consequence? The manufacturers there are interested in these matters. I went the other day to make a speech on general politics in a great manufacturing centre in England. I found they were engaged in an industry there where to me it seemed that chemistry must be of the last importance. There were a number of successful business men on the platform, and one of them made a speech. I had referred to technical education as a subject to which politicians must turn attention. "Well," he said, "there is a great deal in that, but it is not our

way in England to go in for the sort of scientific training that foreigners like. There was a young chemist who came to this town not long ago with a German technical training, and some thought we should take him. He began by asking a high wage, but nobody would have him, and he got down to £2 a week. Nobody would have him at that, and he went back to London."

The result of our British attitude is that there is no demand for the specially equipped student, while in Germany there is a very great demand. I have been told that the class lists of the great technical high school at Charlottenburg, which sends out twelve or fourteen hundred experts, from twenty-two to twenty-three years of age, every summer, are watched by the manufacturers, and a distinguished young fellow emerges probably to be met by somebody, who says, "What are you going to do, my friend? Come to our big commercial establishment (wherever it

may be), and you shall have £200 to start with and 15 per cent. of the profits on anything you invent." That is the way to encourage a good man. In Germany the conditions are still more stringent when you pass to any of the still higher posts in the State. You cannot equip yourself for the professions of a doctor, or a lawyer, or schoolmaster unless you have an appropriate university training, and the result of the whole thing is that in Germany you have got the spirit of culture and the spirit of knowledge applied to industry facing you at every turn and permeating the whole system, and we here begin to feel a formidable competition in the foreign trade of the world, of which we have hitherto had a monopoly. "Made in Germany" is not the term of reproach it was supposed to be ten years ago.

I have sought to give you some idea of what some of you know very well already, the system of education in Germany,

whereby every branch and every stage is linked to every other, and whereby, as soon as you get to the higher grades, the double end, pure culture on the one hand and on the other application of knowledge to industry, is carried out in great perfection. But it is not only when compared with Germany that there is room for introducing the operation of the University into the British system. I want to take the position of the teacher in this country and the effect which reform of the Universities might have upon the status and mental calibre of the teacher, and to illustrate that to you from what is going on in foreign lands. Just as at Liverpool I took the substance, so to-day I want to take the machinery, the workers who bring about that substance, and dwell particularly upon the position of the teacher, and in order to do that the better, I should like to survey the position in which in Scotland we are in that respect.

Until a few years ago, practically until

within the last three years, education of the elementary kind stood by itself, and the elementary teachers in Scotland were a class by themselves. Fortunately we had a great tradition here. We had the tradition of the old parish schoolmasters, who sometimes were very incompetent persons, and sometimes very remarkable men indeed. The parish schoolmaster did not confine himself to elementary education by any means. By the interposition of Providence—because I am sure it was not by the wisdom of Parliament—it came about that the Scottish Education Act, which followed the English one of 1870, was drawn in such a fashion that we could raise no Cockerton case. The result was that the Scottish elementary teachers were left free to impart a good deal of secondary education in their schools, and I am bound to say they used their opportunities as fully as the law would allow them. But still they were only teachers under the elementary system, and that

elementary system, which imposed limits on their individuality, made them a less interesting body of men than the old parochial schoolmasters, some of whom were really a great power in the parish. At last things have begun to change. County Councils, not always very luminous bodies, have got the control of a certain amount of money—the beer and whisky money as it is profanely called—which they can apply for the purposes of technical education and to some extent of secondary education. The consequence of this has been a little improvement in our notion of the extent to which education should go. Some people still complain bitterly of the mischief which education is doing, and they will tell you that education is being carried too far, and that there will soon be nobody left for manual labour. For my part, I would rather have an educated man to dig a ditch than an uneducated man. I pass that argument by as one that is not worth refuting. Now

that we have got a Science and Art Department here, we have something like the beginning of a system of secondary and technical education in Scotland. I won't call it a system, because it is not a system; but we have here some of the elements with which a beginning may be made, and a very good start the Education Department have shown.

I hope very much that the Bill introduced by the Secretary for Scotland last year will be introduced again and passed in an improved form this session. You remember what that Bill proposed to do. It dealt with secondary education, and its purpose was to establish a number of local authorities. I think there were to be thirty-nine in all, one for each of the thirty-three counties and six in addition for six big towns. These authorities were to organise, to endow, and to inspect secondary schools in Scotland. To them would have passed in natural course the control of the technical education money,

and we would have had something like the foundations of a system. But even if that Bill were in operation, to my mind you would then have but the walls of the building. You would still be lacking in the roof. I would like to see that Bill extended by the establishment of not only your thirty-nine authorities, but four other central councils, or whatever they might be called, one in each University centre, one having its headquarters in Edinburgh, one in Glasgow, one in Aberdeen, one in St. Andrews or in Dundee, where you could bring the influence of the University to bear upon the system of secondary education which you are creating. I should like to see the Universities well represented upon these committees, and thereby to see university influence beginning to permeate our system in Scotland as it permeates the education system in Germany. Don't imagine for a moment that you can establish here something satisfactory by merely following the pattern

of a foreign country. Our notions are entirely different from those of Germany. There everything is done by the State right through, and the position of the teacher in Germany is a position which would not be tolerated in this country. The teachers in Germany have grievances of kinds you do not know here, which often seem to be quite intolerable. To that I will refer later on. What we want is to take the British principle, which is local administration and control, fostered and assisted by the State. That, to my mind, is the key-plan to which our educational system must conform, having regard to what is the genius of our people. What we have got to do in order to secure, consistently with this principle, the linkage throughout, with the double end to which I have referred, is to bring the university influence to bear upon our secondary educational system.

Now don't imagine that I think that by their recent traditions, or by their present

attitudes, the Scottish Universities are in such a satisfactory frame of mind that they are well adapted to come into that system. They will, perhaps, have the most to learn of all the three educational authorities. They will have to realise that they, too, like the elementary teachers, ought not to be shut off and enclosed in water-tight compartments, apart from the rest of the educational system of the country. They will have to recognise that their work is co-operative and co-ordinative, just as the work of the others is. But in the Universities we have some men of public spirit, some men, at least, of enlightened ideas, men who are ready and able to take their part in this; and, speaking for myself, I should regard it as a great gain if the elementary teachers and professors were brought together, working side by side, learning from each other, the mind of the one body operating on the mind of the other. What I have suggested—and what applies to England

in another form as well as to Scotland—seems to me the probable way in which that matter will work out here. The little of it that is done, and the much that remains to be done, illustrates the extraordinary backwardness of our educational system as it is to-day. We have got a first-rate elementary system, but it wants improvement, and it will be improved only when it is treated as a part of the larger whole. We have got a system of secondary education which is only beginning to exist, for it does not exist as a systematised whole, and which we have to co-ordinate and put upon a proper and regulated basis. And we have got a university system that is not reformed at all. To my mind, the Universities stand still more aloof from the national life than the body of elementary teachers.

It is good to contrast these conditions and things we have got to reform with what obtains abroad. I have spoken about Germany, and I shall have a word

to say about Germany again. But let us take another nation. I have been learning something lately of the educational system of America, and it is extremely interesting to see what is going on there. America possesses a very go-ahead people, not only in trade and commerce, not only in practical application of science, but in their higher educational matters. You have only got to look at the books America is beginning to pour out on abstract subjects, to look at the recent writings of some of her distinguished writers on speculative topics, to see that in abstract knowledge as in commerce America is going ahead by leaps and bounds. Why is it? I put it down partly, at least, to the development of higher teaching that has taken place in America. Here, if a millionaire devotes himself to making money selfishly all his life, and if he feels a little uneasy about the future as he gets towards the end of his life, he builds a church or makes a big

contribution to some Sustentation Fund. In America his national spirit comes to his rescue, and he founds a University or gives a large contribution to Yale or Harvard. Well, I think for myself the one millionaire will be just as well off as the other. The most striking feature of American national life has been of late years the way in which these men, who have amassed colossal fortunes, have founded great educational institutions. Look at the work of men like Mr. Rockefeller in the creation of the great University of Chicago. Look at the splendidly endowed universities and colleges in the Western States which owe their lavish equipment to American millionaires. Look at the example which has been set us by the great American capitalist, who is one of ourselves, Mr. Carnegie. Look at what he has done, not merely for the land of his adoption, but for the country of his birth.

The American spirit does not, however,

confine itself to university education. In New York there is a magnificent training college for teachers established in much the same way, and linked to the Columbia University, which is the centre of light and culture in the State of New York. Go where you like across the Atlantic, you will find a university, or technical school, or training college, the result not only of State grants as in Germany, where education establishments almost exclusively derive their assistance from the public funds, but of the gifts of rich men. Well, the consequence is you have got a magnificent work being done in both practical and theoretical sciences at the present time, and a great advance in culture throughout the United States, and all over the United States you find the same influences at work. Education there is not the work of the Federal Government. It is an affair either of private individuals or the State legislature. And even the small States show the practical

spirit of the Americans and their appreciation of the lessons which they have learned from Germany and Switzerland. The other day I was told, as an illustration of this, about what was going on in the mainly agricultural State of Wisconsin. It is not one of the greatest States. But it has got its State University. What has the State University to do? It goes in for pure culture, and it goes in for the application of the sciences to industry. But that is not all. In America, in the hot weather, the schools suspend their work. But the teachers fill up their time, and the University of the State of Wisconsin provides summer clases for training teachers in the theory of education, and special courses bearing on its practice, upon a scale which has no parallel in any University we have in this country. The result is that the secondary schools, and even the elementary schools, in the State are permeated by the university influence, and come into contact with the best brains

in the State. Well, America is after all in a much less advanced condition than some of the nations of the Continent. But it has begun with a spirit and energy which will before long bring it alongside any of them.

Now in America you have only got the development of an idea which they have learned, I regret to say, not from us, but from our continental neighbours. I want next to turn to a nation on the Continent which has paid great attention to education, but which has suffered from a defect different altogether from any defect we have, from the lesson of which we may learn a great deal. Nowhere has more keenness been shown lately about the reform of education than in France, and nowhere has the condition of education been pronounced more clearly to be defective. Why is that? France is not like our land, where education is in an unorganised condition and where the State has done too little. In France the com-

plaint is that the State has done too much. I refer to France to illustrate another pitfall into which you may fall in the journey of reform. To this matter of the study of these systems on the Continent I don't think that we can give too much attention. We ought to study their successes and their failures. I wish that among our teaching community there could be a more general reading of those special reports edited by Mr. Sadler of the Education Department, which are full of valuable information about foreign systems of education and the shortcomings of our own. While France comes in for a good deal of attention there, even more edification is to be found in the recent book by M. Ribot on secondary education in France, written by him after making his report as chairman of the recent commission on secondary education in that country. M. Ribot points out that there has been over-centralisation in France as the result of too much State control. The

teacher in France is too much a State official. I know people in this country who say you will never get teachers placed on a proper basis till they are made Civil Service officials. Before anyone comes to that conclusion, let him look at what has happened in France, where the teacher suffers from being too much a civil servant. What we want is to keep to our national genius, not making the teacher too much of a State official, but reforming the authorities on which he is too much dependent at the present time. In France they go to the other extreme. They do not trust local authorities at all. They put the teacher under the Minister of Education, and the result is that in France to-day you have got a sort of educational civil servant, who is bound hand and foot by iron regulations, which are of much the same spirit as obtains in the army. In France you have centralisation carried to an extreme, and, with over-attention to the machinery and form, there has not

been adequate attention to the substance. You have not the double end of Germany and America, and consequently the systems are imperfectly linked. In France you have got a Minister of Education who is all-important and all-powerful. Under him you have got seventeen or eighteen Universities put upon their present footing by a recent French law, some of them more or less admirable in their way, upon which the State spends a great deal of money, but, like our own Universities, pronounced by the French people to be out of harmony with the life of the nation, because moulded on a cast-iron pattern.

Passing from the Universities—I am now going from the top downward—everything is centralised from Paris, and for secondary education you have to go to what are called the Lycées and the great secondary schools or colleges of France. The Lycée is directly organised by the State. The teachers are appointed by

the State, and the whole thing is controlled by the State. The colleges are also secondary schools which are organised locally, but are under State control, and taught by State teachers, the bulk of the money being found by the State. Then you come to the elementary schools, which are called into existence and kept up by the Commune. The teachers are, however, appointed not by the Commune but by the State, acting through the Prefect of the Department, who is a State official under the control of the Minister of Education in this matter, with the result that there is a sort of gap between the local people and the teachers, neither having much influence upon the other. Of course the French system has its merits. Nobody can teach there who is not a properly certificated teacher. Nobody can hold the position who has not got a State qualification. The State finds a great deal of the money for the teachers, and the State trains the teachers in the

great State training colleges, and on that side we have a great deal to learn from the French Government. But while that is true, it is equally true that the whole system is so centralised and cast-iron, with so little room for individuality and elasticity, that we must look upon the French educational system as one-sided. That is an illustration of an evil we must steer clear of if we want to succeed.

So much for France. Now I want to say something which I have tried to dig out for myself about Germany. In Germany you have got complete co-ordination. I need not speak of the Universities. I have already described them. They are kept up practically entirely out of State funds. In Germany it is considered to be a good investment for the State to contribute seventy or eighty per cent. of the cost of the Universities. The secondary schools fall under three classes. There are the State schools, which are kept up by the various German States. There are

the municipal schools, which are generally subsidised by Government grants, but they are locally organised. And there are the private schools, which are very different from the private schools here. Anyone setting up a private school here would set it up and conduct it as you would a business. But in Germany the law would be down upon you if you did anything of the kind. Nobody can teach in a secondary school who has not got a Government certificate, and in order to gain that certificate he has to get a training according to the Government conditions, and that training is pretty stiff. There is a bitter cry going up from the secondary teachers in Germany just now, and when I tell you what they have to go through perhaps you won't wonder. The secondary teacher must have had nine years in a higher school. He must then have at least three years at the University, and he must go through a year at a *Seminar*, a special class arranged for the training of teachers.

He has then to go for a year on probation, and he has of course besides that his military qualification to fulfil, with the result that nobody can be a secondary teacher at all until he is thirty or thirty-one years of age. He then becomes a sort of State official, and although he may be privately appointed and privately paid, he must conform to the Government regulations. If he is a teacher in one of the State schools—and this is by far the most numerous class in Germany—he has to submit to all sorts of rigorous rules, with the result that there is a great complaint in Germany that the teachers are under the iron rule of the State, and that they are not sufficiently paid or sufficiently esteemed. All these things illustrate how, when we try to avoid one evil, we are apt to fly to another; and just now the complaint about the condition of the teachers in Germany is almost as strong and almost as well-founded as the complaint about the condition of the teachers of this country,

only for diametrically different reasons. The German teachers are practically State officials, and everything, from their politics and religion, is rigorously inspected and looked after. Nobody can become a teacher in Germany who has not gone through a Government training college and complied with all the State conditions, and nobody can become a fully qualified secondary teacher who has not gone through a very complete university course.

Well, you have got in America, France, and Germany three systems which we must carefully study and observe before we set about the business of reform in this country. It is not easy to try to reform in the dark. I will confess to you that nothing fills me more with despair than to listen to the debates in the House of Commons on educational subjects. You have got a Minister who has got up all the facts, and who sometimes seems to think it his business to make the subject as dry and detached from all human inter-

est as possible. You have got a number of people listening, of whom nine-tenths know nothing whatever about education, and of whom eight-tenths care nothing. The result is that an education debate, and particularly a Scottish education debate, shows the spectacle of a nearly empty House of Commons, while the older members look in through the door in order to see how long they may absent themselves without the chance of a division. Both the House of Commons and the elementary teachers in Scotland and England seem to be wanting in a largeness of conception about these things and a concrete interest in them, and I think the failure is in both cases due to the same cause. The public have not taken up the matter seriously enough, and neither you nor we will be able to do what we ought to do unless we get some impetus from the public. If education were a burning question in the constituencies you would very soon find that changed.

I should like to see every parish have its unit of culture as well as its unit of local government. I would like to see the minister, the schoolmaster, and the doctor, each taking his part in exercising a great deal of influence outside their mere professional occupations. I do not think you will get that till you have done a great deal in the case of all three to bring them into a much closer relation with the intellectual life of the country. That this is not the case, is not their fault. It is the fault of the public, and it is the fault of the system. In the case of education, at all events, we have got to make some improvement, because if we do not it will be worse for us as a nation. Above all, we want that large luminous point of view Matthew Arnold was so fond of calling *Geist*. We want *Geist* in our educational system. Nothing is more depressing to anybody fond of a foreign language than hearing it taught in a school in this country, and to my mind

it is worse taught in the secondary schools than in the elementary. Take the teaching of French, for instance. If you go into a continental school, you will find everything taught according to a carefully thought out plan. The children are not taught grammar and a whole string of dry things. You will see the little things seated in front of the teacher, and in some regions the teacher is not allowed to teach, for example French, unless he is of the same nationality as the children, for, up to a certain stage, the best teacher is found by experience to be the man of the same nation. The teacher speaks to them simply in French and they try to reply. They don't try to learn swimming before going into the water. From the very beginning they are taught in this way: every word means an action, and they learn in an interesting way that savours of reality. If you go to Holland or to Germany you will, on the average, find people

twice or three times as good linguists as they are here. I should like to see the intelligence which one there finds applied to teaching introduced here also, and I don't see why this should not be the case. I am certain the teachers would respond if the State gave them some stimulus to do so. Then we must have co-ordination, and the linking and the double aim to which I have referred—education beginning on a broad basis, and then proceeding to special subjects, allowing the pupil to go on in whatever direction he chooses, whether it be with a view to a profession or to pure culture.

There is another very important subject, the recognition of the status of the teacher. We have got to make a great deal more of our teachers if we wish them to come up to the standard we desire, and to the standard abroad. In Germany just now there is an agitation for a minimum salary for teachers. We

have got to that in this country in some of the professions. The lawyer and the doctor work only for a minimum fee, and there is no reason why we should leave the schoolmaster a commodity to be bought in the cheapest market, while he is not always sold in the dearest. Depend upon it, if you leave School Boards to take the cheapest teachers, and cut down salaries to the lowest level, they will do so so long as they are the sort of bodies some of them are at present. That brings me to the key of this whole matter. I think the time has come for altering our system of School Board areas altogether. It does not do to take the little area with the little Board, with the men of little minds, and leave them to deal with a great national concern, for it is a great national concern. Not only so, but the nation recognises that, and the State pays the bulk of the money. Why then should the men of little stature, the men whom Plato has described, be left to handle

them? I think you will solve not only the whole question of the security of the tenure of the teacher, but also the question of the rate of salary, and in the end will settle every other question, if you secure large enough and intelligent enough educational authorities. That means that we have reached a stage at which we have to reform the work that was done thirty years ago—very useful work in its time—by enlarging the areas. It may be that at first you will require to have different authorities for elementary and secondary education. You have brought up in the big cities a set of experts, men who have dealt with the large work of primary education. There may be in these cases reason for keeping the control of elementary education, for a time at least, separate from the work of those who have to learn their duties in the business of secondary education. I don't pronounce any opinion about that. I only say that in these big

centres you may have to set to work provisionally if you are to carry your Bill. But to my mind it is perfectly plain that in the country districts we have reached the stage at which we shall have to reform our School Board areas, and it may be, and I hope it will be, that we will get the same area for elementary and secondary education. That may come to be so for the big cities also. Let us recognise that in the country districts the matter is getting urgent, and will have to be dealt with very promptly. Then there is the question of councils in the academic centres to act along with and influence the school authorities, and if you had that, you would have something not unknown in Germany, where as a part of the national system conferences are held, at which educational authorities interchange ideas, thus enlightening the mind of the people who are concerned.

In this country we have already seen an example of the success of these methods

in the educational advance that has followed the passing of the Welsh Intermediate Education Act of 1889. This Act established a separate educational authority for every county, and was supplemented by the establishment, not by Act of Parliament, but as the result of a voluntary movement, of a central board which set to work to organise secondary education in Wales. About the same time there came into existence the new Welsh University, and what has been the result? Why, Wales in many respects is far ahead of Scotland. In 1894 you had there 8 secondary schools with 495 pupils, and after four years, in 1898, you had 88 secondary schools organised by the new authority, with nearly 7,000 pupils, and that out of a population of only a million and a half. Out of the 191 permanent teachers in these secondary schools 134 are university graduates. I am quoting the figures of 1898, those to which I have had access. The meaning

of that is, that the Welsh University Colleges have been putting their shoulders to the wheel, and have been the pioneers in the creation of a new secondary educational system in the country, thereby exerting a most enlightened effect upon the educational system. That is an object-lesson to us.

In Scotland we are moving, though we are only at the beginning, but in Scotland fortunately we are free, to a great extent at any rate, from a great difficulty which is still staring England in the face. That is the question of denominationalism. I say frankly that I am sick of hearing the views of the Church people on the one hand, and of the Dissenters on the other. I do not think that the question of education is primarily a religious question. I object to that altogether. I think we are not far off the time when we shall say, "Away with these controversies," when we shall rise above them, when we shall not inquire particularly what religious

education is given, so long as we can secure an absolutely efficient and first-rate system of education, though I am afraid there will be a good many tears and some broken heads before that is accomplished. But we are arriving at the conviction that efficiency in education is the real consideration.

There is another thing I want to mention, and that is the question of the training of the teachers. The training in the normal schools, which has been a most useful system in its time, is now out of date. The Universities, or establishments in close connection with the Universities, ought to be the true training places of the teachers. If the academic mind is to permeate your educational system you must see to that. I cannot help thinking that at least part of the separation of elementary teaching from the University is due to the interposition of these training colleges. I want to see this changed root and branch. It involves the reform of

our university system. Mr. Carnegie's munificence, great as it is, is only one step after all, and a small step, in the right direction. But it has set people thinking, and it is teaching people to realise that the Universities ought to be the very intellectual centres of the nation, the centres from which emanate light and leading in almost every walk of life, and most of all in our educational system.

Well, you have got to reform, and this I say to you in conclusion. The obligation upon the Universities to put their houses in order is a necessity which we feel very practical and very pressing. The volume of our trade is still large. It has not begun to shrink, but it is not growing with the rapidity of the commerce of other nations. America is rapidly tending to surpass us. Germany is drawing close upon us. Even Switzerland and Holland are becoming formidable competitors. You will have to remedy that state of things,

because, if we lose our commerce, we lose our navy, our empire, and all those things which are depending upon the prosperity of these islands. Somebody once said — I think it was the late Lord Carnarvon—that, apart from her Colonies, Great Britain would be only an over-populated and discontented island in the middle of the Northern Sea. Let us recognise that we are threatened with a greater revolution than we have ever known before. That revolution is due to the fact that our competitors are possessed of greater knowledge, greater educational *Geist*, than is possessed by our people here. We must make provision for the training of our captains of industry, and that can only be done when we put our educational house in order from top to bottom. At the beginning of last century this country was face to face with a great crisis. Great Britain was threatened by foreign nations. There came a great man who faced the

emergency. Mr. Pitt put a spirit into the reorganisation of the position of his native land which carried it through to victory. In the beginning of the twentieth century we have another serious crisis in front of us—a crisis of another kind, where the competition is peaceful and not warlike, but a crisis just as serious. Who will deal with this crisis? It will be the man who approaches it in the spirit in which Germany approached her own restoration when, nearly a century ago, she lay humbled under the heel of Napoleon. Who saved Germany? It was the great men—men like Fichte and Von Humboldt, who called upon the German people to educate themselves. That has made Germany the great power which she is to-day. What we need is the recognition that in this problem of education lies our future; that on it depends our position as the leading commercial nation of the world, aye, and as the empire. The statesman who will

realise that the problem exists, and who will set himself to it in the spirit in which Pitt set himself to the problem of a century ago, will have deserved well of posterity.

III

FEDERAL CONSTITUTIONS WITHIN THE EMPIRE

I HAVE written this paper with a somewhat selfish object. My purpose was to try to get plainly before my own eyes, quite as much as before the eyes of those who are so good as to come here to-day, certain phenomena pertaining to those derivative constitutions of our empire which have been created by the Crown and by Parliament. The phenomena to which I refer arise out of and vary with certain relationships to the parent Government. These particular relationships are nowhere expressed in writing; but they none the less form part of the body of custom of the Imperial Constitution, and,

like the rest of that body of custom, they are constantly, though slowly and silently, undergoing a process of modification and development. Just for this reason they are elusive and difficult to express. In this respect they resemble other principles of our unwritten and progressive Constitution, the statement of which, adequate and accurate for the generation in which it was made, has become untrue for the next. Such statements do not the less represent reality, because the reality is constantly changing.

Let us, then, endeavour to get some light on the nature of the unwritten relations of the Imperial Government to the derivative constitutions which have grown out of the parent stem, as these constitutions stand in the year 1900. The practical interest of the search is that with the consolidation of derivative constitutions upon so-called federal principles, which is beginning to be so much talked about, a new set of problems is emerging

for solution. This process of consolidation began with Canada in 1867. To-day we are the witnesses of another instance of it of the most striking importance.

Let us start on our path of inquiry from a very obvious illustration. The form of the enacting clause of an Act of Parliament is framed thus: "Be it enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled; and by the authority of the same." Suppose an intelligent stranger, knowing nothing of the realities of our system of government, were to sit down to its study and begin with this clause, what would he conclude? He would picture to himself the Queen sitting at Windsor or Osborne or Balmoral, evolving in the Royal mind what is called abroad a project of legislation. He would picture Her Majesty as then summoning, to begin with, the Lords Spiritual, the Bishops, and requesting first

their advice and then their consent. He would next imagine a procession of the Peers Temporal to the Royal presence, and a similar Council being held. And finally he would figure to himself, as a formality at the finish, the Commons being asked whether they had anything different to say. Now our stranger student would have drawn his inferences correctly enough. In them there would be only one shortcoming: his picture would be one of the English Government as administered, not by Queen Victoria, but by Henry VIII. and the other Tudors. The form has survived while the substance has changed.

There is a passage which admirably describes what that substance is to-day in a letter written by no less a personage than the Queen herself to the Emperor Napoleon III., in which she explains her constitutional position. I quote from the third volume of Sir Theodore Martin's *Life of the Prince Consort.* Her Majesty writes: "I am bound by certain rules and

usages. I have no uncontrolled power of decision. I must adopt the advice of a council of ministers, and these ministers have to meet and agree on a course of action, after having arrived at a joint conviction of its justice and utility. They have, at the same time, to take care that the steps which they wish to take are not only in accordance with the best interests of the country, but also such that they can be explained to and defended in Parliament, and that their fitness may be brought home to the conviction of the nation." As the outcome of a slow process, the Sovereign has ceased to govern, and now only reigns. In England this was brought about chiefly by the control of the Parliament over Supplies. This is not necessarily so, nor has it always and everywhere been the case.

In other parts of the Queen's dominions it is through different means that a similar result has come about. The Channel Islands are the remaining portion of the

territories of that Duchy of Normandy which King John lost. The kings and queens of our country have held them as Dukes and Duchesses of Normandy. The people of the Channel Islands have succeeded in establishing the right of constitutional government in their islands. It is true that the question whether the Crown can properly claim to legislate there by Order in Council without the advice and consent of the States or local Parliaments was nominally left open in the great case which was heard before a Special Committee of the Privy Council in 1894, and in which a pile of constitutional documents was brought together, of which it is surprising that no historian should as yet have given any account beyond the rather meagre one in a late volume of State trials. But practically the Privy Council, in recalling the obnoxious Order in Council upon minor grounds, intimated to the home advisers of the Sovereign that never again ought

the larger and more interesting claim to be brought forward. It may therefore be safely assumed that, for example, in Jersey, not less than in Great Britain, the Queen reigns without governing. I was of counsel in that case, and had to study a series of documents commencing at a date a century before the Conquest, and I remember being struck with the difference between the ways in which this result had been attained in England and in the Channel Islands. Here the concession has by degrees been wrung from the Crown as the price of financial assistance. There it was by degrees obtained as the reward for assistance in the various wars with France. The charters and other documents, which disclose the story of the process, were laboriously collected and arranged in several bulky volumes, which are none the less worthy of the attention of an enterprising historian because they repose in a lumber-room at the Privy Council Office, covered with dust and neglect.

Another more familiar, but not less instructive, instance of the binding force of an unwritten restriction which has slowly come into existence is the constitutional impotence of the House of Lords, or any other upper chamber subject to the usages of the British Constitution, to amend a Money Bill. The House of Lords has full legal power to make such an amendment, and every court would be bound to take cognisance of and give effect to it. But as the result of the development of our Constitution amid a succession of struggles over the Commons' claim to the exclusive title to grant Supply, the Lords have become bound hand and foot by chains which are not the less real because they are invisible to the legal eye.

It is just this type of unwritten restriction on powers which theoretically are perfect from a legal point of view, about which I want to say something this afternoon in connection with the various forms of Colonial Constitution—something very

imperfect, for the subject is new, but something of which the reality is becoming in each generation more clearly recognised by the statesmen who have to administer the Colonial Office under successive governments. To the modern student of constitutional development in Colonial Government it is, for instance, astonishing to read such despatches as were, properly enough, written forty years ago by the first Governor of Queensland, Sir George Bowen, a man of real ability, and to reflect that they were written with the full assent not only of the Duke of Newcastle, the Colonial Secretary of the day, but apparently of the people of Queensland. Sir George claimed, among a multitude of other rights which now seem to us very odd, a constitutional right to revise the decisions of his ministers about such matters as appointments to public offices. A claim like this may have been, and possibly was, constitutionally correct in those days. But since 1860

a great evolution has taken place in the position of a Colonial Governor. It is still true that he is freer to act on his own initiative than is the Sovereign at home, who has delegated to him his powers. If he has none of the divinity that doth hedge a king; if, as was established by the Privy Council in such cases as Hill *v.* Bigge (3 Moore P.C. 465), Cameron *v.* Kyte (3 Knapp 332), and Musgrave *v.* Pulido (5 Ap. Cas. 102), he is, unlike the Sovereign, liable to be sued in the courts of the colony for acts that are illegal and done in excess of his authority, still he is something more than a mere part of the Colonial Constitution; he also represents the Imperial Government, and he is therefore free, in cases which seem to him to touch the Imperial interests, to act on advice other than that of his ministers. He may, for example, veto a Bill where, in an analogous case at home, the Sovereign would not be free to veto. He may, under the Colonial

Office Regulations of 1892, obtain the advice of the Imperial law officers through the Secretary of State. But these exceptions arise out of a distinct reason—the inherent and necessary title of the Imperial Government to the decision of such questions as really concern the empire generally, and for this purpose to have its interests watched over by its own representative Governor, who has thus a double duty to perform. So far as his position is merely that of Governor under a Constitution permeated by the usages of that British model after which it is fashioned, so far must he in every practicable case act upon the advice of his ministers. This at least has become true to-day, whatever may have been the case in those days of Sir George Bowen, in which the Colony of Queensland had only just received its separate Constitution.

I have dwelt on this topic as an illustration of the extent to which the Constitutions of our Colonies have of late

years developed, after the very fashion of the general Constitution at home. Like the latter, they are really in the main unwritten. The Acts which constitute them are but the skeletons which the practice of governors, ministers, parliaments, and judges have to endow with flesh and blood before the dry bones can live. The process of endowment may be gradual. The stature of the living model is not attained at once. A set of constitutional and legal precedents has to be established in each case, and this takes time. Changes of view may and do occur; and this is because, be the Acts of the Imperial Parliament calling our Colonial Constitutions into life never so elaborate and precise, the true substance is unwritten. No stranger could make out the real position of, say, the Governor-General of Canada from the words of the British North America Act of 1867, any more than he could, in the illustration already given of the enacting

words of an Imperial Statute, ascertain the real position to-day of the Queen. It is not merely that the common form of the modern Colonial Constitution Acts confers on the colonial legislatures large powers to alter the constitution conferred on them — powers which, for example, were in a striking fashion exercised by Manitoba in 1876, when her Parliament abolished the Upper House of the Legislature, and her Governor decided that he was not even entitled to reserve the Bill, so clear was the constitutional right arising out of the principle of responsible government; it is because the British Constitution is in its essence neither rigid nor even written, and because every constitution which is modelled after it tends to resemble it in every point where the express provisions of an Imperial Statute do not stand in the way.

We may thus expect to find in the various forms of constitution which obtain throughout the dominions of the Crown

this process of silent approximation to the parent example manifesting itself. We shall expect to find this not less in the relationship to the home Government than elsewhere. The home Government is and must remain charged with the burden of Imperial interests, and must act on its own initiative through the Governor who represents it in the colony. Subject to this condition the relationship in all other respects of the Colonial Parliament, not only to its Governor, but through him to the Imperial Government and Parliament, will tend, whatever it is in the eyes of the theorist and the lawyer, to become in the eye of the statesman similar to that of the Imperial Parliament to the Crown. This is the direct and inevitable work of our familiar machinery of responsible government wherever put in operation; and its attainment can, under British traditions, never be more than a question of time. So complete does the growth become that there may

even, in certain cases, as I will presently show, arrive a time at which courts of law can and do take cognisance of the developed relationship. Let us, in order to get the conception of this growth clear, begin by glancing at certain of the forms of government of the dominions of the Sovereign outside Great Britain and Ireland.

The earliest of these forms in point of origin is that which one finds with varying characteristics in those constitutions of a feudal origin which obtain in the islands adjacent to Great Britain, Jersey and Guernsey (the latter, for this purpose, including Alderney and Sark), and the Isle of Man. The relationship of the Crown to the islanders, so far as the active business of government is concerned, has varied enormously. If it is using loose language to say that the monarchy has changed in these islands from an absolute to a limited one, it is at least approximately true. In Jersey, for

example, a progress of charters, to which I have already referred, granting privileges to the people in consideration of the assistance rendered by them in successive wars with France, has helped materially towards the establishment of constitutional government. At last, in 1771, a code for this island was assented to by the Crown, which is not the foundation, but one of the expressions, of its constitutional liberties. Under the provisions of this code it was laid down that no laws or ordinances should be passed unless by the States or Parliament of the island. It was further provided that all warrants and documents manifesting the executive will of the Crown should be registered by the Royal Court of the island. It is not probable, in view of the decision of the Privy Council in 1894, already adverted to, that the home Government will nowadays refuse to recognise the right of the States to consider and give or refuse its assent to every projected law, whether it

originates with the Crown or, as in future it is likely always to do, with the States. If Jersey—and the same thing is true of the other islands referred to—had been larger and more important and at a greater distance from London, there is little doubt that under this form of constitution she could have obtained for herself a freedom as complete as she could have gained under those parliamentary forms where, theoretically and in the eyes of a court of law, the Imperial Parliament can do everything, while constitutionally in local matters it can do nothing. What is interesting is that in the case of an appanage of the Crown, such as Jersey, tribunals of justice can do what they cannot do where there is a so-called statutory constitution—take notice of the very important unwritten limitations on the theoretical powers of the home Government, which remain binding so long as an Act of the Imperial Parliament is not invoked. Thus the validity of

Orders in Council, which, so far as the Imperial Parliament was concerned, the Crown was free to make for the Channel Islands, has been impeached, and successfully impeached, before the Privy Council, on grounds which no court of law could have taken cognisance of had such a case arisen in regard to Canada or Australia. Of such cases some are reported in the Law Reports, while of others, not so reported, I have had personal cognisance in Channel Islands cases in which the Privy Council has treated constitutionality and legality as though, in dealing with the Constitution of these islands, they were equally within its capacity to notice.

A still more striking illustration of the capacity of a court of law to take notice of what, in its inception at least, seems to have been properly a constitutional restriction on the powers of the Crown arises in the case of the next form of Colonial Government, that of a Crown Colony, where the privilege of holding a

legislative assembly has once been granted by the Crown in its charter. In such a case Lord Mansfield, in a judgment the authority of which has never been questioned, held, in a common law action tried at the Guildhall in 1774,[1] that a court of law would treat the grant of the privilege of making laws in a representative assembly as irrevocable and exclusive, and would declare void a subsequent Order in Council purporting to levy a tax. Of course Parliament could have validly legislated, but the point was that the ordinary and natural paramount authority was held to have committed legal as well as constitutional suicide, and put itself in the position of being unable to recall its own Act. The constitutional reason for this it is easy to see; the legal reason is much more obscure. But there it stands established by great authority that such legal reason exists.

[1] Campbell *v.* Hall (1 Cowper, 204; 20 State Trials, 239).

I turn now to the ordinary type of statutory constitution established in the most important portions of the empire by Act of the Imperial Parliament, where the right of self-government granted is of responsible as well as representative government. Here the courts confine what they take cognisance of to the provisions of the Statute. The Imperial Parliament they of course treat as supreme, and where the language of the Statute leaves the Crown nominally free to act on its own initiative, the courts decline to take notice of these constitutional restrictions on the exercise of that power which we all know to exist. But these constitutional restrictions have other than legal sanctions, and they have become much more definitely recognised, as the theory of Colonial Government has developed during the last quarter of a century. A striking case of the manifestation of a desire that they should exist in full force is to be found in the preamble

to that British North America Act of 1867 which gave Canada her present Federal Constitution, and which I take to mean that the statutory framework was intended to be filled up from the store-house of unwritten tradition. "Whereas," so runs the preamble to the Statute, "the Provinces of Canada, Nova Scotia, and New Brunswick have expressed their desire to be federally united into one dominion under the Crown of the United Kingdom of Great Britain and Ireland, with a Constitution similar in principle to that of the United Kingdom." The Act goes on to declare that the executive power of the Government of the Dominion is vested in the Queen, to establish a Privy Council for Canada, which is to advise the Governor-General, to constitute a Parliament for Canada, to set constitutions for the provinces, and to distribute legislative powers under the famous 91st and 92nd sections between the Dominion and Provincial Parliaments, conferring, however,

on the Dominion Parliament the general common form power of making laws for the peace, order, and good government of Canada, and reserving to it all powers not expressly given to the Provincial Parliaments. Now from the very first the words which I have quoted from the preamble made it clear that in the Constitution of Canada the Crown, except as regards Imperial matters, which were not delegated, and to which that Constitution consequently did not extend, was intended to be in just the same position towards the Canadian Parliament in point of constitutional usage as is the Crown to Parliament at home. Not only responsible government, but responsible government free from interference from Downing Street, was intended to be granted so far as purely Canadian affairs were concerned. That this was no small matter will be realised quickly by anyone who consults the learned work of the late Mr. Todd, the Librarian of the Canadian Parliament,

who has written a treatise on Parliamentary Government in the Colonies of an authority which places it alongside of that of Sir Erskine May's great home book. One has only to contrast the principles laid down in the despatches from Lord Carnarvon and his successors to the Canadian Governors-General with those written from Downing Street by the Duke of Newcastle only seven years previously, to see how remarkable was the advance recognised. What the British North America Act expressed in its preamble was therefore novel in 1867. But there was in the Act a peculiarity of another kind at which it is interesting to glance even to-day.

Not only is the power of giving or withholding the Royal Assent to Bills passed by the Provincial Legislatures and Lieutenant-Governors conferred on the Governor-General, but by ss. 58 and 59 the appointment and dismissal of the Lieutenant-Governors themselves

were placed with the Governor-General, as distinguished from Her Majesty in person. Now this is a remarkable provision, for a reason which I will point out. Soon after the Act passed, the Supreme Court of Canada—which was established with a view to obtaining an interpretation of the Constitution upon the spot, and which has done much valuable work of this kind—began to show a tendency in its judgments which caused suspicion and friction in the Provinces. This Court laid stress on those provisions in the Act which seemed to point to the principle of union of the Provinces, and they laid down principles which if accepted would have placed the Provinces in the position of subordinate governments. A series of questions emerged sharply, of such delicacy that it was essential that they should be decided by an arbiter holding an absolutely even hand between the contending parties, and simply interpreting the words of the Dominion Act in the light of that

British Constitution which its object was to reproduce. Such an arbiter was found in the Imperial Privy Council. A series of cases was presented to it, some by way of appeal from the Supreme Court of Canada, and some by way of special reference under special Acts passed concurrently by the Dominion and Provincial Parliaments. In the end the Privy Council settled that the true view of the Act was that it established a federal distribution of not only legislative but executive powers, and that in the matters delegated to them the Provincial Governments had an authority as high as that of the Central Government. The relationship was, in other words, held to be one of strict co-ordination, and that in executive as well as legislative matters. On this principle one burning conflict after another was stilled. The control of the liquor laws, the limits of direct taxation, the Government titles to gold and silver, the right to appoint Queen's Counsel, the control of

the fisheries in the great lakes and rivers, the exact provincial boundaries, the adjustment of debt—these and many other issues were peacefully resolved as between the Dominion and the Provinces. But while to the legal principle of construction which the Privy Council established there is no real exception, a remarkable exception to the constitutional principle has, by the combined operation of the language of the Act and of the usages which it imported, been created in regard to that office of Lieutenant-Governor to which I have adverted. In the eye of the courts the Lieutenant-Governor of a Canadian province, when appointed, holds directly from the Crown and exercises, where necessary, on provincial advice, all prerogative powers within the scope of the Provincial Constitution. The distribution of executive power is federal. But under ss. 58 and 59 of the British North America Act the power to appoint and dismiss every Lieutenant-Governor rests with the

Governor-General. Accordingly, when the majority of the Dominion Parliament and the Dominion Ministry desired to dismiss Mr. Letellier, the Lieutenant-Governor of Quebec, although supported by a majority in the Provincial Parliament, the Home Government advised Lord Dufferin, the Governor-General, that he must act on the request of his Dominion Ministers if pressed.

The Constitution of Canada sprang at once into full life and vigour because the Imperial Parliament was in 1867 simply giving effect to exhaustive resolutions passed by the federating provinces. The South Africa Act of ten years later, which proceeded on no such definite impulse from within, was stillborn. There is, indeed, another reason why it is not likely ever, as originally framed, to come to life. It was in the main a mere copy of the Canadian Act. Now the Canadian Act has been, between the Supreme Court of Canada and the Judicial Committee of the

Privy Council, interpreted with a view to the circumstances of Canada. The independence of the Dominion Government which has been attributed by the decisions of these tribunals to the Provincial Governments is an illustration of this. If the similar language of the South Africa Act had to be applied, it would, however, inevitably be found that the courts were hampered in their interpretation of it by the tradition which had grown up under Canadian decisions, and the Constitution it established would probably prove to be unfit for South Africa as it is to-day. From this danger the latest and most interesting example of a constitution framed after the British model for a distant but great portion of the Queen's dominions has been happily, in large measure, delivered. The Australasian Commonwealth Bill is the outcome of no scheme elaborated in Downing Street, but of the deliberations of Australasian statesmen conferring on the spot. Like

the scheme worked out by a similar process for Canada, a scheme from which it is not unnatural that it should differ in very important respects, it proposes to do much more than establish a statutory Colonial Constitution of the old-fashioned type. Of the constitution contemplated by the Commonwealth Bill it is not too much to say what was said by a distinguished Canadian lawyer, Mr. Justice Gwynne, in delivering judgment in the Supreme Court in the case of The Maritime Bank *v.* The Queen (4 Cartwright 421): "We make a very great mistake if we treat the Dominion of Canada, constituted as it is, as a mere colony. The aspirations of the founders of the scheme of confederation will, I fear, prove to be a mere delusion if the Constitution given to the Dominion has not elevated it to a condition much more exalted than, and different from, the condition of a colony, which is a term that, in my opinion, never should be

used as designative of the Dominion of Canada." If by "colony" the learned judge meant a part of the empire where there is a mere delegation for local purposes of Imperial authority, constitutionally alterable without consultation of the inhabitants, a mere stage in advance of the old-fashioned plantation, his words are clearly true. One aspect, at least, of the view for which he was contending finds confirmation in the words used by Lord Selborne about a case which falls far short of the level of constitutional government reached in Canada—the case of the Legislature of India. In his judgment in the Privy Council in The Queen *v.* Burah (3 Ap. Cas. 904) Lord Selborne said: "The Indian Legislature has powers expressly limited by the Act of the Imperial Parliament which created it, and it can, of course, do nothing beyond the limits which circumscribe these powers. But when acting within those limits, it is not in any sense an agent or delegate

of the Imperial Parliament, but has, and was intended to have, plenary powers of legislation as large and of the same nature as those of Parliament itself."

Time will not permit me to linger over the topic, fascinating to a constitutional lawyer, of the novel and original scheme of the Australasian Commonwealth. I can only draw attention to one or two of its features. In the first place s. 51 limits the power of the Federal Parliament to make laws to certain very important, but none the less restricted and defined, matters, giving this Parliament no general legislative powers. In this point the Bill approximates more nearly to the precedent of the United States Constitution than to that of Canada, which gives general powers to the Dominion Parliament and only specified powers to the Provincial Legislatures. Indeed, the scheme of the Australasian proposals, as disclosed by the very words of s. 106, is to leave the

State Constitutions as they are at present, only subtracting from them such powers as are necessary for the erection of the Federal Constitution. This section is followed up by the 109th, which provides that, in case of a conflict of laws, those of the new Commonwealth are to prevail. There is no such express provision in the Canadian Act; but the Privy Council has decided, in Union Bank *v.* Tennant (1894 Ap. Cas. 31) and other cases, that it is implied. There is no provision, such as gave rise in Canada to the constitutional dispute over the Letellier case, enabling the Governor-General of the Commonwealth to appoint the State Governors. Such a provision would, indeed, have been hardly consistent with the scheme of the new Constitution, which is to leave State rights intact except where expressly interfered with. S. 70 provides for a federal distribution of executive power. SS. 53 to 56 inclusive enact and make written provisions, most of which exist similarly

in the parent British Constitution, but are there unwritten. S. 57 contains an ingenious and novel provision for reconciling the two Houses of Parliament in case of serious differences by making them, but not until after a dissolution, vote together. The final section of the Bill provides for the alteration of the Constitution and for the preservation, in a decision on such alteration, of State rights by means of a submission of the new law to the electors in each State. The analogy to the United States Constitution stops very soon. The American Constitution knows but little of what we Britons mean by "responsible government." It makes the Executive in a large measure independent of the Legislature. But the Australasian Commonwealth Constitution breathes in every clause the spirit of true responsible government. The Executive really flows from, and is controlled by, the Legislature in this as in any constitution of the British type. Truly it looks as though a man-

child were about to be born of the Imperial Parliament.

I have indicated the fashion in which the functions of the Crown and of the Colonial Governors have by degrees become circumscribed by the silken bonds of constitutional usage. I have sketched what, in other words, may be described as the operation of responsible government in cutting down the prerogative, and in making local the advice upon which it is to be exercised. But there is another tendency which is equally apparent. The Imperial Parliament does not coerce her children. The bonds of empire are the bonds, not of any law, written or unwritten, but of a common heritage of history, of interest, and of blood. The result is that the problem as to when the Imperial Parliament is justified in interfering is getting to be a more and more difficult one. Fortunately it rarely arises; and I am convinced that it will arise yet more rarely as soon as

the people of those distant dominions of the Crown, where our Constitution has been reproduced, realise that there is no desire to interfere with their absolute right of autonomy in their own concerns, but only an aspiration to keep the empire together, and to pervade its institutions with a spirit that is imperial in the noblest sense. For the existence of the Constitution of the empire I am persuaded that it is desirable, and indeed essential, that the home Parliament should remain in theory and in law supreme. Constitutionally we are all getting to understand how this relationship of the mother to her children is tempered. No doubt it would be possible for the Imperial Parliament to renounce this supremacy, to delegate some authority to Colonial Legislatures, and the rest to a purely British Legislature. She might put herself, so to speak, to sleep, and the Parliaments which had taken her place would be co-ordinate only, like the legis-

latures which exist side by side in Canada, and are to do so in the Commonwealth of Australasia, with no supreme authority among them. Anyone who desires to see how as a matter of law this could be done has only to turn up the chapter in *England's Case against Home Rule*—the ingenious book written by Mr. Dicey on Mr. Gladstone's Irish proposals of 1886. Mr. Gladstone's Bill was not intended to do anything of the kind, whatever its language may have suggested to Mr. Dicey. But he has shown how the thing can be done. Now I have always disliked the words "Imperial Federation" just for this reason. It is all very well to use the word "federation" when you are speaking of the consolidation into a dominion or commonwealth of a group of derivative constitutions, such as those of which I have been speaking in British North America and Australasia; but is it appropriate to use it of any conceivable

relationship between the Imperial Government as the keystone of our empire, as it is now, and what are called the Colonies? You could create a federation of the Imperial and Colonial Governments, no doubt; but in creating it you would, if you followed the principle which the word implies, break up the Constitution of the empire and substitute—at least so I think—what would in the main be a rigid and inelastic constitution for the unwritten and developing one which has so far worked well. The ideal of Imperial Federation is a fine ideal; but I think it will have to be attained by other means than federation in the legal sense. While the Imperial Parliament remains legally supreme, and consequently a most useful tool for effecting ends in which all concerned have concurred, we are rapidly recognising that it is constitutionally bound so far as the Colonies are concerned, just as the Crown has recognised that it is itself analogously constitutionally

bound. The real meaning of the new doctrine of continuity in external policy seems to me to be the recognition that in foreign and colonial affairs Parliament is a trustee of its powers not only for the electors of Great Britain and Ireland, but for the empire at large. More and more do successive Parliaments seem to tend to be guided by the ministers of the day in their proceedings with regard to these foreign and colonial affairs. The constituencies at home are beginning to recognise this. I am certain that those whom I myself represent would rebuke me for disloyalty to the principles of representative and democratic government if I asked them at an election to let a party issue be raised about the policy of our Parliament with regard to, say, the internal government of Australasia. This, they would point out to me, is by your own principles for Australasia herself, and your business as representing us is merely to see that the Colonial Office,

in applying to the Imperial Parliament for powers, is acting in accordance with Australasian wishes.

In the nature of things all this must become yet more apparent. It will inevitably be accompanied by closer and more frequent consultations between the Ministers of the Crown in London and the Ministers in the other and more distant parts of her dominions. Some form of council may grow up, some form even of representation in our common Parliament. But it is not the machinery that matters: indeed, the less we have of it, in all probability the better. What is wanted is such a sense of responsibility and constitutional usage, checking the hasty exercise of legal power on the part of the Houses of the Imperial Legislature, as shall make its relationship to the distant subjects of the Crown become as easy as is that of the Crown itself. This appears to be the true notion of a closer Imperial connection, a connection the form of which

it is useless to try to define in advance or express in terms of abstract principles. Events in the past have so ordained it that the centre of the empire is London, and not Sydney, nor Ottawa, nor Cape-town. If the past had been different, this too might have been different. If the empire continues to cohere, it may still be otherwise. Who can say that at some future period the metropolis of the British people will not be found at some spot to-day reckoned remote, but destined to become the centre? What is important is that, come what changes may, the unity of our race and of that link which is its precious possession should never be impaired or lost sight of.

And this leads me, in conclusion, to say a few words about a topic which, I cannot but think, appears more thorny than it really is.

The inevitable outcome of the growing importance and magnitude of the more distant parts of the Queen's self-governing

dominions is that they will more and more rely on their own tribunals for the administration of justice. This is as it ought to be. It is a tendency implied in the very notion of self-government, in that very power of making laws for peace, order, and good government which is the common form of the instruments under which our fellow-subjects beyond the seas rule themselves under the Queen's flag. But there is a class of question, a class small in number, but large in importance, which reaches beyond the analogy of ordinary litigation. Some of the questions which belong to this class concern the ascertainment of the true principles which underlie the type of British Constitution, unwritten as much as written, under which all of us who are subjects of the Sovereign live. Some other questions concern topics such as the great principles of that system of Common Law, itself elastic and developing, which is our common heritage. In an empire such as ours surely there

is room for a great and final arbiter, a tribunal chosen not from one locality nor from one people, but selected from the best brains of the various peoples and various localities which compose that empire, a tribunal to which appeal might be made in last resort for the sake of uniformity in great and governing principles. The institution of such a tribunal seems to grow, almost as of necessity, out of our common Constitution. It should be invoked, not frequently nor as of course, but only on grave occasions of general interest. It would not interfere with the finality in ordinary cases of the judgments delivered by the various High Courts of Appeal in or out of England; but it would remain as a unifying influence, a bond corresponding in judicial matters of Imperial importance to the unifying influence where Imperial interests are touched, of the executive powers of the Crown. It is not difficult to conceive a Court of Imperial Justice, such that the

empire as a whole would be proud of it, as the greatest of ancient or modern times, and would feel its rule a benefit and no burden.

But this is a speculation lying beyond the scope of a paper which has already become too long; and I have only touched on it because it seemed to me that no discussion such as that which has engaged us this afternoon would have been complete without a reference to it.

IV

THE APPELLATE COURTS OF THE EMPIRE

"THE man," once wrote a great thinker, "who acts on one maxim only is a pedant, and spoils things for himself and others." There are many applications of this excellent proposition. I am going to take it as my text on this occasion. No single maxim, perhaps not any maxim, has prevailed in the minds of the founders of the two great tribunals of our empire of which I have to speak. No Bentham, no Austin, no man of merely abstract mind would ever have devised or been able to create them. They are only to be understood by the observer who bears in mind

the undefinable character of the unwritten and developing Constitution our people live under at home and in their colonies, Constitutions which have been moulded by other hands than those of philosophers, and by other forces than movements of troops and declarations of legislative bodies. Most of our judicial institutions, and particularly these two great tribunals, illustrate the truth which has of late become so apparent to our historians, that the bulk of the forces which operate to balance and change the political and social conditions of a people like the British has always operated, and must always have operated, from within rather than from without. Of these inward forces, some, such as religion, are more apparent than others. The action of what, using the word in a very wide sense, may be called education is more subtle, but hardly less far-reaching. But religion and education do not complete the list. I have chosen as the topic of this address a part of

the machinery of a third force, if more subtle than even education, hardly less potent—the administration of justice, and the administration of justice on its Imperial side. I hope to show you that this constitutes a real and most important portion of the silken bands which, with so little friction, hold our great empire together. Its action is often misunderstood. It is apt to be looked upon as a mere means of declaring, without altering, the existing law and Constitution. But that is a narrow view, and mischievous pedantry when the attempt is made to enforce it in practice. Fortunately for us all, as may be held even by the most devout believer in representative institutions, the law-changing functions of our great Imperial tribunals are so little observed and attract so little attention at the hands of those who love to apply abstract conceptions to Imperial problems that they have been suffered to operate unchecked. The result has been an important chapter

in the history of the development of an unwritten constitution. The justice of the Sovereign, the fountain in theory of all our justice, would inevitably, had it been administered by tribunals acting under the direct influence of the policy of her Ministers for the time being, have become suspect. But it has rarely been so administered. Governments fortunately have had lent to them but little power of meddling with it. The examples to the contrary, the English Star Chamber and the Scots Privy Council, have long since ended a brief and inglorious career of intermeddling with judicial affairs. Incidents beyond our seas, like the trial of Nuncomar by Sir Elijah Impey, have been but few, and if they occurred to-day that far-reaching engine of Imperial justice, the Judicial Committee of the Privy Council, would relentlessly deal with them. As showing the faith in this body which has been inspired into our distant peoples, it is told of a traveller who had

penetrated into a remote part of India that he found the natives offering up a sacrifice to a far-off but all-powerful god who had just restored to the tribe the land which the Government of the day had taken from it. He asked the name of the god. The reply was: "We know nothing of him but that he is a good god, and that his name is the Judicial Committee of the Privy Council." The sense of the presence of sure and effective justice which this body has come to inspire is something which we as Britons may boast of. It examines impartially the legality of the actions of the Queen's meanest subject and the Queen's Imperial Government. I have myself witnessed cases when appeal was brought against the constitutionality of an order made by the Queen in Council, advised, of course, by an Imperial Ministry to the Queen in Council. The Judicial Committee has reported that the appeal should be allowed, and the Order in Council quashed, as easily

as if it had been dealing with the judgment of a Colonial County Court.

Such a spirit of fearless justice is of course the outcome of the calibre of the men who have sat in the tribunal. That tribunal has not been at all times equally strong. But, in the main, the spirit of the great judges who have from time to time presided over it has inspired their successors. Names like those of Mansfield, of Grant, of Kingsdown, of Cairns, and of Selborne will always be associated with its history. And here I pause for a moment. It is with the deepest sadness and profoundest sense of the loss, not merely to Great Britain but to the empire, that I recall the fact that William Lord Watson will sit there no more. I am indulging in no panegyric inspired by mere personal regard for a great judge whom I was privileged to know, when I say that he had rendered more services to the empire than many a distinguished statesman. Those who have followed closely the

recent history of Canada know and can illustrate what I mean. In 1867 Lord Carnarvon passed his Confederation Act, which created a Constitution in accordance with resolutions passed in the various parts of Canada. Under this Constitution there was to be a Central Parliament and Executive at Ottawa to deal with the general affairs of Canada, and parliaments and executives in the provinces which should deal with provincial matters. The people of the Colony, who were suspicious of interference from Downing Street, also obtained power to create a Supreme Court for Canada, which should settle any constitutional questions that might arise, the intention being to get rid as far as possible of the Privy Council as a Canadian Court of Appeal. This Court was not set up for some years, but when it was it began to produce a very different effect in the Colony from that which was intended. The judges took, or were supposed to take, the view that the meaning of the

Confederation Act was that the largest interpretation was to be put upon the powers of the Central or Dominion Government, and the smallest on those of the Provinces. About twenty years ago a series of decisions were given by the Supreme Court of Canada which certainly gave colour to this view. There was alarm in the provinces, and the result was a succession of appeals to the Queen, for which special leave was obtained from the Privy Council. I well remember the circumstances of these cases, for it so happened that, when a junior, I was taken into them on behalf of Ontario, which bore the brunt of the struggle with the Dominion before the Privy Council. So important were they deemed in Canada that the Provincial Prime Ministers used to come over to argue in person with the assistance of the English counsel. Almost from the first Lord Watson took the lead in the decision of these appeals. He worked out a different view of the

Canadian Constitution from that which had been foreshadowed by the Canadian Courts. He filled in the skeleton which the Confederation Act had established, and in large measure shaped the growth of the fibre which grew round it. He established the independence of the provinces and of their executives. He settled the burning controversies as to the Liquor Laws, and as to which Government, Dominion or Provincial, had the title to gold and silver. His name will be long and gratefully remembered by Canadian statesmen. It is difficult to realise that he is gone. He was *the* Privy Council Judge *par excellence*. His mind was wholly free from any tendency to technicality, and he never failed to endeavour to interpret the law according to the spirit of the jurisprudence of the Colony from which the appeal came. If it was a Cape appeal, he was a Roman Dutch lawyer; if it was an Indian case of adoption, he entered into the religious reasons for the rule to be

applied. If it was a Quebec case of substitution under the old French code, or a Jersey appeal about the custom of Normandy, it was just the same. He imported none of the prejudices of the Scottish or English lawyer. In the House of Lords he was just as striking; whether it was a Scottish appeal, or an English case about some abstruse question of real property law, he was a great judge. For you his name will go down to posterity coupled with those of your great Scottish lawyers, the men of whom Inglis was the type. For us in England he will be recalled as one of the most superb judges that ever sat in the House of Lords. But the greatest memory of him will, to my mind, be that which must long be preserved in the distant colonies of the empire, for which he was the embodiment, not only of a great legal intellect, but of absolute freedom from partisanship, and of a passionate love of justice.

I have lingered over the great name

of one who is, alas! no more, because I feel that in Lord Watson we have the ideal of what a judge of the empire ought to be. Whether he sits in the House of Lords or in the Privy Council, a man in that position wields enormous influence. He not only decides particular cases. Such is the weight of the decision of this Court, that its spirit extends far beyond its letter, and it moulds and makes as well as interprets the law. How much this has been the case with the House of Lords, you who are Scottish lawyers know. Its history as a Scottish tribunal of appeal has been an illustration on a great scale of the truth that fine legal intelligence, even in a comparatively unfamiliar field, is better than the understanding whose main qualification is only special knowledge. The jurisprudence of all countries is much the same in its fundamental principles. Strip it of its technical terminology, and the differences in great measure disappear. The master

of legal principle who has a mind large enough to be free from provincialism is, therefore, in all cases the best kind of judge. What he does not know he sets in its proper place and proportion, as he gathers it from the argument. This is why the decisions of men like Eldon, Cairns, and Selborne, even on technical questions of Scots conveyancing, have been so well received in the Court of Session. This is why a great judge like Watson could rule the local tribunals of the empire. The reports of the decisions of the House of Lords in Scottish appeals are full of valuable illustrations of this truth. I remember as a student being puzzled by an English bankruptcy decision of Lord Eldon's, which had laid down what was supposed to be the principle of justice in cases when the drawer and the acceptor of a bill of exchange had both gone bankrupt. No English lawyer dared to question what Lord Eldon was supposed to have decided in *Ex parte*

Waring, and it was treated as binding in all the English Courts. But the same question arose in Scotland, and the great Scottish banks carried the point to the House of Lords. There it turned out that Lord Eldon had been either misreported or misunderstood. The rule in *Ex parte* Waring was put aside, and he would be a rash man to-day who gave an opinion that, Lord Eldon and *Ex parte* Waring notwithstanding, the English law was really different from what the House of Lords has declared to be that of Scotland. The Orr Ewing case may be mentioned as a further illustration of the same process. On the other side, I think I may suggest that the Scottish law of the construction of wills, so far as principles of vesting are concerned, has not suffered from those decisions of the House of Lords, beginning with Young *v.* Robertson, which have brushed aside supposed technicalities, and made the rules in the main the same for both countries.

If this has been in a remarkable manner the benefit of a great tribunal of appeal shared in common by Scotland, England, and Ireland, it has been not less strikingly so in the case of the Colonies. It is not too much to say that the judgments of the Privy Council have been of enormous influence in guiding and educating the Colonial Courts. The power of appeal to a very strong tribunal has kept these Courts up to this mark, and caused them to take increasing trouble over the reasons for their decisions.

The extent to which the two great tribunals have been of value in interpreting the law in a liberal spirit, and not less in moulding and assimilating its various systems, suggests other considerations. The empire has developed enormously within the last few years. The Colonies show a desire for closer relations with the mother country. Already they have manifested this desire as regards the administration of justice, by accepting the

invitation given them under the Bill which Lord Rosebery introduced, and which Mr. Chamberlain finally passed into law, to send three representative judges to sit in the Privy Council. In the last three years Sir Henry Strong, the Chief Justice of Canada; Sir Henry de Villiers, the Chief Justice of the Cape; and Sir Samuel Way, one of the Australasian Chief Justices, have, from time to time, sat as the representatives in the Imperial tribunal of these parts of the empire. But why should the Judicial Committee of the Privy Council be any longer allowed to remain separate from the Judicial Committee of the House of Lords? There are four law lords with life peerages who sit in the House of Lords as representatives of England, Scotland, and Ireland. Why should not a sufficiency of distinguished Colonial and Indian judges be made life peers and added to the House of Lords? Why should not this step be followed by the fusion of the two Com-

mittees, which would then consist of substantially the same members, into an Imperial Court of Appeal? There would, in that case, be one great tribunal. If I were a person of influence I would cause it to sit always in the House of Lords, instead of letting its members sit, as they now do when they represent the Privy Council, in a shabby room up a dirty staircase off Downing Street. The new tribunal would generally sit as one, but it might divide itself, and sit in divisions to dispose of the less important cases. It would be so strong that, if a Scottish or English judge in Edinburgh or London was incapacitated by illness, the law lord might come down and take his place temporarily, as do the English Chancellors and ex-Chancellors in the English Court of Appeal. Such a reform would make possible a really great tribunal, worthy of the glories of the greatest empire the world has ever seen. It would form a strong link in the binding together of that

empire, for the Colonies, the groups of which would have sent representatives to it, would naturally feel it to be in part their own possession. It would be a real step towards the only kind of imperial federation which seems possible — that which can be brought about naturally and without artificial pressure. It would give a new position to the House of Lords. The three colonial law lords would sit there for all purposes, and would be, on occasions, spokesmen of the people they represented. They would carry to these people ideas and experiences which were to be gained in the mother country alone. They would, on the other hand, tell us of the working out of experiments made in lands where the possibilities of reform were less restrained by tradition than is the case here. Above all this, they would form the nucleus of a non-party element in the House of Lords, an element the introduction of which might be the precursor of further changes in the composition

of that House. That representatives of the colonies should, on the invitation of the Queen, sit in the Upper Chamber of the Imperial Parliament is no new or startling idea, and the reorganisation of the supreme tribunals of appeal—a reorganisation which is really matter more of form than of substance—affords a natural opportunity for a first step in this direction.

But I did not come here to-night to talk of anything even verging on a problem of Imperial politics. You and I, as lawyers, are concerned primarily to desire that our supreme tribunals should be of a calibre the finest, and a dignity the highest that we can make them. Imperialism of this kind is beyond party controversy, and with us the only question ought to be how we may most completely carry the colonies with us. After all, this is not so simple a matter as it seems. I have already mentioned that only a few years since the Parliament of Canada did, what

as the Parliament of a self-governing colony it was entitled to do, set up a Supreme Court of Appeal at Ottawa, with the intention of abolishing for all practical purposes the appeal to the Queen in Council. It turned out that they had been in advance of public opinion, and as, in the statute setting up the Court, no such express words had been used as were necessary if the prerogative right of the Crown, as the ultimate tribunal of appeal, was to be taken away, the Judicial Committee decided that the appeal to them still lay. That time we were more fortunate than we ought to have been considering the littleness of the public interest at home in the Judicial Committee. To-day we are face to face with a danger of the same sort. The new federal proposals for the Australasian Colonies at first were intended to abolish the appeal, and in their present form may somewhat restrict it. It is to be hoped that these proposals will not, in the result,

be found to have gone as far as some seem to have desired them to do. But this will most easily be averted by making our Australasian Colonies feel that we offer them the finest Court of Ultimate Appeal that the empire can produce, and by, as I hold, giving them a part to play in its constitution. As a faithful Imperialist my heart rather sinks when I go to argue an Australian Appeal at Downing Street, in which I know that there is keen interest in the Colony, and see only a scratch collection of three members of the Judicial Committee sitting at the green table, the others having been drafted away to recruit the judicial quorum for the day in the House of Lords. The public would not permit this if they only knew what was at stake at this moment, and both the present and the late Lord Chancellor have struggled hard to remedy what the Treasury, driven by the public, alone can effectually remedy.

There is another aspect in which lack of general interest in the Judicial Committee is most undesirable. That Committee has often questions of international and constitutional law of the gravest moment to determine, and it is not only of political, but of national importance that these should be resolved with the aid of the full strength of the Court. I will mention some instances. A short time ago the case of Cook *v.* Sir John Gordon Sprigg* came before the Privy Council, on appeal from the Cape. The appellants were grantees of certain concessions from a native called Sigcau, who was paramount chief of Pondoland. Pondoland was annexed by the Crown, and Cook, the grantee of the concessions, sued to have his rights under it recognised. It was argued that by the ordinary and well-known principles of international law property must be respected by the sovereign who annexes

* [1899] A. C. 572.

and assumes the duties and legal responsibilities of the former sovereign with respect to private property within the ceded territory. But it was decided that, admitting this to be true, no municipal tribunal had authority to enforce such an obligation, and that, even if there had been an express bargain between the two potentates, diplomatic pressure was the only remedy. Now I am not criticising this decision when I say that it is as startling as it is momentous. Grotius might well turn in his grave at such a refusal to recognise an integral part of the *jus gentium* as enforceable by a Court of Justice. The point is that to hold, rightly or otherwise, that if a wrong had been committed, it was a wrong for which the Courts could not take cognisance of any remedy, was to lay down a proposition as important, politically, as it was far-reaching in its consequences.

I will give one or two other instances of the wideness of the range of the influence

of this tribunal. In the course of the debates on the Death Duties Act in the House of Lords in 1894, the question arose as to what were the constitutional powers of the House of amending or rejecting the bill, which was of course a money bill. To some extent the question was admittedly covered by resolutions, which had been passed in the end of the seventeenth and the beginning of the eighteenth centuries by the House of Commons, and accepted by the House of Lords. To a less clear extent a further limitation on the constitutional power of the latter Chamber in regard to money bills had been established by the resolutions of the Commons, acquiesced in by the Lords, passed by Lord Palmerston's Government, after the rejection by the Lords of the Paper Duties Bill of 1860. It turned out in the course of the debate of 1894 that the question of the extent of these limits had been referred by one of the Australian Colonies to the Queen in

Council, and that the members of the Judicial Committee had given a ruling on it. The point had arisen in regard to the powers of the Upper Chamber of the Colony over money bills, and the Privy Council advised that the theoretical power of *amendment*, which undoubtedly existed as a mere matter of law, could not *constitutionally* be exercised at all, and that the power of *rejection in toto* was subject to grave constitutional restrictions.

Another instance of the same sort of *quasi-political* procedure arose in a case, not reported, but in which I was engaged as counsel in 1883. The Judicial Committee, presided over by Lord Chancellor Selborne, had to settle the boundaries between various Provinces of Canada and the unorganised territories which are under Dominion control. The inquiry was very complicated, but finally the Lord Chancellor intimated that the Committee was in a position to give its decision. Counsel proposed, following what would undoubtedly

have been the true principle a few years previously, that as the fixing of boundaries was within the prerogative of the Crown, the decision should receive effect by an Order in Council. But the Lord Chancellor intimated that the Committee considered that the growth of the power of Parliament made it proper that the new boundaries should be laid down, not by a Prerogative Act, but by an Act of Parliament itself.

I will trouble you with only one more case. Some years ago a prisoner in the Island of Jersey was sentenced by the Jersey Courts to death. She turned out to be a French subject, and it was deemed advisable by the Imperial Government, instead of carrying out the sentence, to hand her over to the French authorities. The Jersey authorities refused to agree. The Board which controlled the Jersey prison had a majority who sided with the Island. The Imperial Government had great difficulty in getting hold of and

releasing the prisoner, and to prevent a recurrence of this difficulty an Order in Council was made, on the advice of the Secretary of State, repealing a provision of an old Act of the Jersey States or Parliament, and securing to the Imperial Government a majority on the Prison Board. The Island appealed to the Queen in Council against the Order of the Queen in Council. A special Judicial Committee, very strongly manned, sat to consider the question, which proved to be one of immense historical and constitutional interest. It was this. As you know, the Channel Islands are the last fragment remaining, since King John lost the rest, of the old Duchy of Normandy, and are held by the Queen as Duchess of Normandy. Now undoubtedly the Queen is only a constitutional monarch in so far as she is Queen of England. That is to say, the old struggles between the Crown and the Parliaments of our forefathers had established the right of Parliament to withhold

supplies, and finally to restrain the Crown from legislating excepting with the advice and consent of Parliament. But there had been no such struggles in the Duchy of Normandy, and two eminent historians, Mr. Freeman and Mr. Palgrave, had differed over the very point which now came before the Privy Council, the right of a Norman Duke before the Conquest to legislate without the advice and consent of his Curia, the body from which the States of Jersey had inherited their traditions. The law officers argued the case for the Imperial Government, and it fell to myself to open the attack on the Order in Council for the Island. We had prepared, with much assistance, elaborate collections of historical materials on both sides. This ponderous collection of charters and other documents forms, by the way, a unique source of information, available to-day for anyone who cares to undertake to write the constitutional history of the Channel Islands. I opened my case on

three grounds: First, that Duke Rollo and the predecessors of William the Conqueror could be shown, from the fresh materials which our experts had collected, to have legislated only with the advice and consent of the Curia, and that therefore Queen Victoria must be presumed incapable of constitutionally repealing an Act of the Jersey States of Parliament without the advice and consent of that Parliament. Secondly, that although there had been no struggles over supplies in the history of the relations of the Crown with the people of the Channel Islands, there had been a series of charters extending the powers of self-government of the people, given after each war of England with France, as a reward for the assistance of the islanders, and that this had had an analogous constitutional effect. Thirdly, that the new Order in Council was a breach of an understanding come to between the Government of Lord Melbourne and the authorities of the Island fifty

years before. The case was heard by the most imposing tribunal I ever argued before. The Prime Minister, the Lord Chancellor, two ex-Chancellors, four law lords, a Bishop, and two lay Privy Councillors were the judges. In the end they advised Her Majesty to quash her own Order in Council, on the third ground, that it had been a breach of the old understanding, and, after the fashion of concrete-minded Britons, hinted, not obscurely, that they should be displeased if the law officers pressed them to decide at all the great constitutional question whether the monarchy in the Channel Islands was a limited one. Lord Watson, indeed, bluntly indicated that he should decide nothing of the sort. Needless to relate, the islanders went away much impressed with the impartiality of the Queen's great tribunal. There is a report of this case in the State Trials, but, oddly enough, the newspapers of the time missed it.

I have said enough in the course of these observations to indicate to you my own strong conviction that the judicial functions of the Privy Council have attracted less attention at the hands of our rulers than they ought. There is a larger conception of Imperialism than that which forms a party cry at elections. This larger conception of Imperialism is less controversial, but not less far-reaching. It recognises in the Crown and in the system of imperial defence great features of our existence as an empire. But it refuses to recognise in these the only features of that existence which demand attention. It may be that in the sphere of education, in the foundation which some are at present endeavouring to compass of an Imperial University, a new link will soon be found. But this at least Imperialists, such as I own myself desirous of being reckoned, hold to be certain, that in the administration of justice, and in the existence of a great but scantily recognised central tri-

bunal, we have one of the most real bonds that can hold together the distant parts of the Queen's dominions in those relations which only a common heritage can give.

V

SCIENCE AND RELIGION

IN his story of Germany as it was in the time of Luther, Heine tells us what a tremendous change Luther with his own hand effected. Not only did he revolutionise the attitude of men towards authority in religion, but he brought about a new era, in which everything had to justify itself before the tribunal of reason. Heine tells us, in his imaginative fashion, how, as Luther and his companions entered the town of Worms singing "Ein' feste Burg ist unser Gott," the old Catholic Cathedral shook to its rafters, and the ravens whose nests were there flapped their black wings and flew away. Luther's hymn itself, with its proclamation of the

authority of God, and God alone, Heine calls the Marseillaise hymn of the Reformation. The revolution had begun. Authority was shattered. Reason was now the only lamp of mankind, and conscience the only prop and staff in the wanderings of life. Man was face to face with his Maker, and needed no priestly intermediary. So Heine sums it all up.

But the spirit which Luther had roused could not, so Heine tells us, be confined in its activity. The mantle which the great reformer cast from him when his work was done descended on Immanuel Kant. If authority had to justify itself before the human intellect in one case, so must it in all. It had now to be shown that religion and science could be reconciled. The thinker of Königsberg, with his *Critique of Pure Reason*, was in truth the bearer of the very torch which the great reformer had kindled, when from his cell in the Wartburg he bade the people read the Bible freely and without stint, and

interpret it for themselves. Authority was gone, and science and religion were face to face with none between.

What is science? What is religion? What is the nature of that system of knowledge of which they form two of the branches? These are questions to which we had better try to find some answer. It was easy for theology, three or even two hundred years ago, to repel the attacks of science, then full of quackery and superstition—of alchemy, phlogiston, perpetual motion. Gaps like these in the results of the earlier inquiries into the secrets of nature left room for the easy penetration of the armour of science by the defensive weapons of theology. But now all this is altered. Science is furnished with weapons as different from those of the time to which I allude as is the Maxim gun from the crossbow. She has attacked theology with vast armies at every point of the field. The latter has been driven from her outposts, and has

abandoned much of what used to be considered essential ground of defence. The Mosaic cosmogony has capitulated before evolution; verbal inspiration has yielded up to criticism the fortress which it once held. And yet, the advances of the last quarter of a century notwithstanding, religion remains a power as great and as living as at any time in the world's history. That power is of the heart rather than of the head. In the field of the latter she has suffered. Her theologians have been unable to resist the onslaughts of the dervishes of physics and biology. It may be necessary for her well-being that the lost territory should be retaken, and she may feel at this moment impotent to accomplish it. But religion as distinguished from theology, that belief in the reality of the highest standpoints which has been the faith of the men and women who in all ages have been regarded as greatest and wisest, this remains undiminished in its hold on the

heart. Herein lies a paradox which yet must be solved if human reason is not to incur reproach.

Well, a solution has always been talked of by thinkers, however little it has been grasped by the multitude. The problem is no new one. It raised its head at Athens more than two thousand years ago, before the days of Christianity, and in much the same form as to-day. Only the movement of the forces of reason was then directed more to the overthrow of the extreme pretensions of science than to the defence of faith. Socrates used to delight to take weapons of precision from the armoury of Greek philosophy, and with them to put to rout the claims of the physicists of his day to have discovered the whole truth. The genius of Plato has preserved for us the story of these battles. In another form Aristotle has shown us the same spectacle of the driving of science to within her own proper boundaries. In our time that

spectacle has been repeated. There is a view of the history of philosophy which sees in it, not system deserted for system, but the development and perfecting of a great conception which has remained substantially the same under forms and in language that have varied with the successive moods of the Time Spirit. To the question as to the ultimate nature of reality, of that into which all besides is resoluble, and in terms of which all else must be expressed if final truth is to be attained, the answer of the great thinkers of all ages has been that this ultimate reality is mind and not matter. In this Plato and Kant, Aristotle and Hegel, are at one, however varying their language, and however divergent on minor points. When estimated broadly and read aright, even such different inquirers as Spinoza and Hume have really turned out to be pointing us to the same conclusion. They have furnished us, have these generals of the forces of reason, each in his own

fashion, with weapons of a precision which is deadly when directed against the loose procedure of the invading army of science. They have made it plain, however often the lesson has been forgotten, that religion, art, science, philosophy has, each of them, its own definite territory, and that none has the need or the right to cross the boundaries of the others. How they did this and what they said is worth trying to grasp. It is no novel statement, no new conclusion about the nature of things. It is the expression of what the great thinkers have agreed on without reference to minor controversies. Viewed so, the history of philosophy is no chaos of contradictory systems, but the presentation of a single great thought which I shall try to-night, however imperfectly, to place before you. For it seems to me to contain within itself the reconciliation of science and religion of which we are in quest.

"Two things," said Kant, "fill me with a sublime sense of admiration, the moral

law within, and the starry heavens without." But powerful as is the emotion which the spectacle of these must ever awaken in our breasts, mere emotion can be no test of truth. It may be that, understood aright, these two sublime facts are but the outcome of development from what lies far below. Men of science tell us that the starry heavens are but the result of the cooling down through millions of years of a vast nebulous mass occupying a space in which the universe as we know it has evolved itself in accordance with well-known mechanical laws. The solar system, they say, to which our planet belongs, is but a fraction of this result. On that planet, as it became cooler and cooler, life began to appear in rudimentary forms evolved from the combinations of the element carbon with other chemical elements. With life there began, so they show us, a strictly natural process of adaptation, not by any controlling power from without, but by

natural and sexual selection, and the consequent survival of the fittest to survive. There came a point when mere life and instinct grew into the dawnings of something higher, when the brute began to feel the growing impulse towards society, self-restraint, and decency. This impulse, operating through countless generations, has ended, so they tell us, in mind with its moral law, the last therefore and not the first, the creature and not the creator of the universe. I have always been strongly of the view that one of the idlest efforts of theology, and an effort which, to do theologians justice, is not made so much to-day as it once was, is to dispute the conclusions of science after once conceding its premises. Undoubtedly if we admit the tacit assumption which physicists make, that all that is real, even in ultimate analysis, can be expressed in terms of relationships in time and space, and be described under the only conceptions which physical science can

employ, the result I have sketched will follow. To a Lucretius or a Tyndall there is no answer, if we once concede that atoms and energy are final realities, and that the only way of saving theology is to justify the conception of a mere physical hand, gigantic in power, it may be, but still operating mechanically *ab extra*, as the hand of what Matthew Arnold has called a magnified and non-natural man. To invite the physicist to accept such a conception is to invite him to throw over what, from his plane of inquiry, is well established, the principle that matter and energy can neither be added to nor subtracted from. If theology descends from its high ground, and unreflectingly abandoning its position accepts battle on this level, it will be defeated, and that inevitably. But why should theology admit the tacitly made assumption that the conceptions of atoms and energy, of space and time relationships, are final, or represent realities at all, as

distinguished from convenient abstractions. For it may well be that such abstractions have validity only as expressions of certain aspects of reality, in contradistinction from reality itself. The clearest-headed men of science—men like Huxley, Spencer and Clifford in this country, and like Johannes Müller and Du Bois Reymond in Germany—have admitted and even pressed this latter view. They have told us that the conception, for instance, of a physical atom as final and indivisible, or of a living cell as mechanically or chemically constructed, corresponds to nothing that can conceivably be experienced, and is, if regarded as a thing that can be seen or felt, full of latent contradictions. They claim for certain of the leading conceptions of science no more than that they form convenient working hypotheses. The admission is no new one. The old Greek sophists were fond of testing the idea that space was a real thing, consisting of parts, by

a dilemma. Either, said they, it does not consist of real parts, in which case what becomes of your indivisible and final atoms, or else it does, in which case Achilles could never, however swiftly he ran, overtake a tortoise. For when Achilles had got up to the point from which the tortoise started, the latter would have in the interval passed through another, though smaller, division of space. By the time Achilles had got through this new division the tortoise would have passed through another yet smaller, but still equally real division, and so on to infinity, with the result that it was mathematically demonstrable that Achilles could never catch up the slow-moving tortoise. The conclusion which the subtle Greek thinkers drew was not that Achilles could not overtake the tortoise, for this would have been absurd, but that the conception of space as a self-subsisting real thing, made up of real divisions, or of matter as constituted out of really final

atoms, was wrong. They went on to tell us, or at least Plato and Aristotle did for them, that to conclude otherwise was to mistake a point of view of limited application for an adequate and exhaustive account of reality. There is, for example, no such thing to be found in nature as the straight line which Euclid defines, length without breadth and the absolutely undeviating way between two points without magnitude. And yet this is a legitimate and necessary way of looking at space. We do not regard such a straight line as a real thing. We never see or feel it in the nature that surrounds us. It is only an abstraction made in reflection when reflection confines itself for the moment to a single and isolated point of view, and looks away from other and equally legitimate aspects of reality. The world as we experience it consists just as much of colour and weight, and beauty and morality, as it does of space, and yet all of these very

real aspects the mathematician ignores. He does it, and he has to do it, in order to concentrate his attention, and to extend his own kind of knowledge. But he cannot assert that the phases with which he deals are the only real ones. Why, then, should atoms and energy, which have no more counterpart, as actual facts experienced, apart from colour and weight and beauty and morality, than have straight lines and squares and numbers, set up any better title to be the ultimate reality to which all else is reducible.

I will now approach the problem on another side, and, again premising that I am giving you not my own special conclusion, but one that, so far from being new, is our common heritage from the great masters of thought, show you that instead of mind being properly conceived as the last development, as science says, it cannot properly be looked on in any other light than as the *prius* of everything that is.

Suppose that the Time Spirit could retrace its steps and that we found ourselves face to face with a universe consisting of nothing but a nebulous mass of atoms in motion, what would its existence mean? What would be implied in its being there before us? Science tells us that such a universe might have been perceived, but it also tells us something more. What does to be perceived mean? Let us take the case of sight, the sense through which we perceive colour, and ask what science tells us. Is the colour which we say we see something out there existing in the object independently of me, or is it the outcome in my brain of some cause, operating from outside, which has nothing to do with colour? Science itself does not hesitate about the answer. The physical foundation of colour is the vibrations of the medium which pervades the space between the object seen and the eye that sees. These vibrations stimulate the retina. This stimula-

tion affects the optic nerve, which transmits the stimulus to nerve centres in the brain. It is through these nerve centres that the sensation of colour first arises. If the optic nerve be cut there is no sensation of colour. A person born without an optic nerve would not know what colour meant. In the thing perceived there is no colour, nothing but the movement which causes the vibration. Thus science proves to us that the perception of colour is not an impression which the mind receives passively from without, like one who looks through a window, but is wholly and entirely the creation of the nerve centres in the brain. Our final universe of matter and energy would then be unlike anything we, or even men of science, have any experience of. Not only must colour be denied to it, and relegated to the perceiving mind, but sound, smell, taste, touch must follow in like fashion. They are but the outcome of a stimulation of the nerves. There is no meaning in say-

ing that the cause of this stimulation is colour, or sound, or smell, or taste, or touch. Save as sensations in the brain, so physiology tells us, which all observers project in the same fashion into the object, they have no meaning, that is to say they do not exist. If we take what are called the primary qualities of things, such as extension in space and duration in time, science conducts us to the same result. They are for physiology meaningless except as the projections of a brain which can perceive nothing directly, but can only as it were interpret the stimulations of which the nerves tell, and beyond these can have no real object of knowledge. Such, at least, is the account which science gives of knowledge. Matter and energy now stand before us shattered. They exist only for brains that perceive, and they cannot be the finally real things. There is no escape from the dilemma. Either science is right, and the supposed universe of matter and energy turns out

to have been there only for a perceiving mind, or the account which science has given of the whole matter has been somehow one-sided, in which case we need not trouble our heads over the bearing on the question of the ultimate nature of reality of the mechanical conception of things, or the evolutionary hypothesis of their origin. But the difficulty does not end here. The brain which perceives—what of that? It is itself known only through the senses, and is itself therefore only a projection of a mind that perceives. What science proclaims as true in the one case, she must acknowledge to be true in this case also, which is indistinguishable from the first. The conclusion she is driven to seems to be the exact opposite of the one with which she started. It is not that things produce mind, but that mind produces things. The universe of matter and energy is meaningless excepting as object constructed by the mind for which it is there.

Now all this would seem absurd and impossible if taken as an exhaustive and sufficient statement of the nature of the world in front of us. For it is plain, whatever else is not plain, that we do not make that world. It was there before our time. It will be there after our time. It dominates us more than we dominate it. It is a most solid and substantial reality, no magic-lantern picture projected by our imaginations. But be it observed that the difficulty has arisen entirely out of the action and pretensions of science. The plain man believes in the reality of the world as it seems, and of all the aspects of that world—not only its mathematical and physical and biological aspects, but its æsthetic and moral and religious phenomena. Good and evil, beauty and ugliness, are just as real to him as lines and squares and causes. It was only science that sought to shut them out, and to insist on the reality of one aspect only. And it now seems that,

just as science destroyed beauty and goodness, and the notion of God Himself, when she adopted the point of view of evolution out of matter and energy as the *prius*, so she destroyed matter and energy when she adopted the physiological account of the perceiving brain. Now this looks very much as if the same mistake had been made as we saw was made by the mathematicians who asserted that space consisted of real finite parts, and who were in consequence unable to explain how Achilles could overtake the tortoise. The fallacy is that of confounding an aspect of things, which is got by abstracting from an isolated and special point of view for the purpose of extending knowledge, with the reality of these things. The true conclusion would appear to be that the rich concrete universe which lies before us cannot be reduced to mathematical or physical or biological elements, or be adequately conceived or apprehended through the spectacles of the mathematician

or physicist or biologist. Rather must all its other aspects be regarded as equally real with these. Rather must each of these aspects be looked upon, not as independent reality, but as the outcome of the work of reflection, which separates, in order to bring into clearer consciousness, aspects which are never separated in a concrete reality which is one and indivisible. If so, beauty is as real as biology, and morality as mathematics. The evolutionary account of the universe is a true account, given from a limited standpoint, of one aspect, but of one aspect only, and the other scientific account which makes the human brain come first instead of last is equally accurate and equally limited. There is only one conception which reconciles these two points of view, a conception which embraces them both and regards them as presenting only partial views of the truth, the way of looking at things which sees in mind, for which all is, not a finite object of

knowledge, fashioned in the likeness of man, but that for which neither the expression substance, nor the word cause, is adequate, that which can be looked on only as the subject for which the universe is object, and in the activity of which all the various phases of that universe are embraced as aspects, separable in reflection, as a means to clearer knowledge, but not otherwise separable. This was what Plato and Aristotle thought and taught, and this it is that underlies what is deepest in modern speculation from Bishop Berkeley down through Kant to our time.

But if this be the true view of ultimate reality, that its nature is to be sought in mind, and that the apparent separations of its aspects are only the outcome of the limited capacity of the human mind for grasping all together in their entirety, important consequences arise from our conclusion as to the relation of science to religion. The mathematician tries to conceive the universe as though it were

reducible to relations of quantity. The physicist seeks to view that universe as one of motion and of mass, of matter and of energy. Each deals with an aspect which stands out isolated, simply because he is looking at the riches of concrete life through limited categories which exclude all else for the sake of clear knowledge of one phase, a phase which is separate in thought alone. The biologist conceives living organisms as self-conserving, as preserving their identity amid a constant change of the material out of which the living tissue is made, as remaining the same throughout a development from birth to death, but a development which is brought about, not by any external cause, but from within. He conceives the cells, out of which the modern science of biology tells us that the body is made, as working together for the purposes of a common life, not like effects brought about by some outside physical cause, but more like soldiers obeying a general in command.

In so doing he follows the dictates of common sense. It cannot be the result of chance that millions of embryonic formations present the same structure, and amid constant changes of material follow the same course of development. No fortuitous external cause, such as a Lucretian concourse of atoms, can account for this. But neither can we put it down to, what would just as much be an external cause, the action of some anthropomorphically conceived influence operating upon the organism from outside in space. The first alternative is contradicted by the facts, the second by science, and particularly by the principle of the conservation of energy. But neither hypothesis is necessary. It is only when these aspects, that of mechanism and that of life, are taken to be independent realities, separate otherwise than in the reflection which has separated them, that the contradiction arises. If we are content to believe in the reality of the world as it seems, and

to regard these as points of view in the mind for which all these are there, to take mind and not matter as the *prius*, the difficulty will disappear. Just as we were convinced that Achilles really did overtake the tortoise, and that it was only our way of looking at the matter which caused the difficulty of conceiving it, so we shall recognise that all these aspects are equally real, in their own way, and from the standpoints to which alone they are appropriate.

Now turn to another stage. We have seen that there is no difficulty in regarding the living organism as really living, that is as self-conserving and self-directing in its growth through change in the material of its cells. From the standpoint of the physicist it seemed and had to be regarded as a mere mechanism, a sort of automaton whose shape and movements were caused from without. But this has turned out to be merely one aspect, an abstract way of looking at matters, adopted for the purpose

of regarding the organism's relations as quantities, as measurements and weights, and so getting clearer knowledge from that point of view. Now common sense, which compels us to look at the organism under higher categories than those of mechanism, also compels us, in the case of some organisms, to regard them as rational and moral beings, as well as merely living. Here we have another aspect, from which the lower one, that of mere life, is isolated by abstraction under the categories to which biology confines itself for the furtherance of its own purposes of study. These rational and moral aspects of the living being contradict the biological, which try to exhibit them as and reduce them to the products of a lower stage of existence, only if the latter are regarded as independent realities. But if both be but aspects, then both are, as common sense bids us say, equally real and in truth not separable save by the abstractions of human and limited intelli-

gence. A higher kind of intelligence would have no difficulty in construing them. It is only the limited character of our faculties which occasions our difficulty. We are always striving to express reality in terms of the categories which are lower, because the relations of simple quantity which they express are the ones which we can most clearly and easily grasp. But in truth and in fact our common sense bids us recognise the higher aspects as not less real, and indeed as taking up those that are lowest into themselves. Thus beauty, intelligence and morality come to be understood to be no illusions of the senses, but the higher realities of life.

Now that we have seen something of the nature of the categories of the other aspects, what shall we say of the conception of God, that which has been present to the mind of man in various shapes in all ages, and which is the supreme category of religion? Religion may be defined to be that aspect of the

universe in which the relation of man to God appears. If the analysis which has been so far followed be a true one, God must be conceived, not as a force operating from outside in space; not mechanically, as a substance or cause; not as a magnified and non-natural human being, but as a spirit; as mind; as the subject for which the world is object, and in which the limited plane of human intelligence appears only as a stage or phase. The universe must be, in this point of view, in God, not as one thing is spoken of as within another in space, but as only being there "for" God as the supreme and only subject, the knowledge that creates and is one with what it knows. The various stages in our knowledge and the aspects of reality to which they give rise must surely be looked on as phases of His nature isolated by that imperfect instrument, human intelligence. Were that intelligence perfect, we should see all things as in God, and realise that it was

only in so far as we were objects in knowledge that we appeared as separated from His supreme reality. Subject to these limits we are, and they prevent us from attaining to that plane of apprehension from which we should see that we exist as we do and know what we know only in so far as we are in some sense one with that Divine Intelligence for which the objective universe and we "as objects in it" exist. But the condition of our conscious nature seems to be that it should regard itself as limited, as an object distinguished from the thought which apprehends it. Yet while knowledge cannot present the true relationship as a clearly apprehended fact, such as the lower categories enable us at least to speak as though we could present, nevertheless there are analogies which come to our help. In our ethical relationships we transcend the limits of our individuality, and sometimes find the very realisation of our being in sacrificing ourselves, it may

be for those near to us, it may be for our country. This is why the soldier will gladly face death on the field of battle. A higher conception of himself than one which is merely individual moves his choice. So with religion. Its practice has in all ages taught men and women to disregard the apparent limits of their individualities. The martyr who has chosen the stake rather than sacrifice his faith, the devout Buddhist to whom the world has become as nothing, as but the veil of Maya—these have shown their sense of things unseen, and of a temple not made with hands. In the practice of religion we seem to realise the existence of the highest aspect of human life, though we cannot present it pictorially to ourselves. Regarded in that aspect, the mind even of man is in direct relation to absolute mind, is what it is because it is not truly severable from God, the ultimate and finally real aspect of a universe which exists only in and through Him. That is how science and philosophy

come in the end to reduce the reality of the universe to the being object for a subject. It is only in symbols that we can express this truth, because the language which we use is drawn from everyday life, where for the purposes of practice we draw distinctions which are in reality provisional only. Thus it comes about that religion, when it tries to express itself and to explain, has always tended to become pictorial and anthropomorphic, and to expose its dogmas to the attacks of science. But rightly understood, regarded as the symbolical language in which we express what by intelligences limited as are ours cannot be apprehended pictorially, the meaning of religion becomes clear. It is an affair of the *will* rather than of the *intellect*, of feeling rather than of abstract knowledge. But just in so far as it is so, it is the phase of comprehension in which we realise for ourselves what philosophy points to, but can do no more than point to. It gives us that direct and living con-

tact which cannot be attained save in its practice. So regarded, it takes us beyond and above the categories of science, aye and beyond the standpoint of mere morality. What, indeed, is that which is blamed and properly blamed as moderatism but the confusion of the categories of morality with those of religion? There is no real conflict with religion, because science and morality set up no properly independent realities, but merely standpoints which no more come into conflict with that of religion than does the sphere of geometry with that of jurisprudence. It is only when the teachers of religion, who seek to communicate their own vivid and real experience, those aspects of things which they rightly hold to be the most real because they are the most high of all, fall into the language of anthropomorphism, and speak in symbols and metaphors as though they were speaking of quantities and causes in space and time, that apparent contradictions arise. The outcome of the

profoundest thought in the history of philosophy has been to exhibit the relationship of science and religion as one not of contradiction but of harmony, and to display the various stages of knowledge as ascending platforms or planes. This was the teaching of Plato. This was what Aristotle meant when he distinguished the active from the passive reason. This was what Kant and his successors aimed at enforcing as the only possible view, if reason was not to be regarded as involved in hopeless self-contradiction. The ultimate explanation of the universe seems to lie in a system not of *Causes*, but of *Ends*.

My task has been to try to set the outline of this great conception before you. How difficult it is and how imperfectly I have done it I know well. But if I have stirred some among you, who have felt perplexed when face to face with the conclusions of modern science, to the wish to dig for yet deeper foundations of belief, I shall be content. These

things are hard to grasp. They can only be won as distinct conclusions by reading and by meditation. But surely for those who ask whether there be no escape from the burden of a materialism that denies the reality of what seems best in life they are worth pursuing. It is not much we can do for ourselves, still less for others in helping them towards what each has to work out and win for himself. But at least we may assist each other to some sense of the truth of the words in which Plato makes Socrates conclude a famous dialogue: "If, Theætetus, you have or wish to have any more embryo thoughts, they will be all the better for the present investigation, and if you have none, you will be soberer and humbler and gentler to other men, not fancying that you know what you do not know."

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